# **Centres of Excellence**

Performance evaluation report 2015 - 2018



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#### 1. Introduction

A new Centres of Excellence (CoE) strategy was developed in 2014 following a study that was commissioned by the BDT Director in fulfilment of Resolution 73 of the World Telecommunications Development Conference (WTDC-10). This resolution sought to establish a new strategy for CoEs to enable them to respond better to the new and changing capacity building challenges of the ICT and digital environment.

Key elements of the new strategy that are particularly pertinent to this report are that the CoEs shall operate on a self-sustainable model and that at the end of each cycle, a review of the performance of the participating CoEs shall be undertaken and a report produced. This report shall form the basis for improvements to the performance of the CoE network in the future.

In accordance with this new strategy, each of ITU's six regions could be allocated up to six CoEs. At the end of the selection process for the 2015-2018 cycle, a total of 32 CoEs were selected with Africa, Americas, Arab and Asia-Pacific regions allocated six CoEs each and CIS and Europe three and five CoEs, respectively. Subsequently, two CoEs in the Asia-Pacific region withdrew from the network, and one CoE in the Arab region did not sign the cooperation agreement to confirm its status as a CoE. Furthermore, three CoEs, two in Africa and one in Europe did not deliver courses under the CoE framework during the cycle and did not participate in other CoE activities. For these reasons, the total number of operating CoEs during this cycle was 26 (see Annex 2 for the list of CoEs). This report is a review of the performance of these 26 Centres of Excellence for the period 2015 to 2018.

In preparation of this report, in June 2018, a questionnaire was sent to the 26 operating CoEs with an invitation to participate in the end-of-cycle evaluation exercise. Two CoEs, Moscow Technical University (MTUC) and Centro de Capacitación en Alta Tecnología para Latino América y el Caribe (CCAT LAT) did not complete the evaluation questionnaire. While this report presents performance of all the 26 CoEs, the parts of the report that cover the CoE feedback does not include the views of the two CoEs that did not submit the questionnaire.

The questionnaire was designed in two parts. The first part sought information on the experiences of the CoEs and their views of the CoE network. The second part focused on the training activities undertaken by each centre (up to June 2018) and how the trainings were implemented. The CoEs were also asked to present information on the human and financial resources allocated to CoE operations as well as revenues collected from training fees charged. The information on human and financial resources allocated by CoEs, provided in this report, is based on the information provided by the CoEs in the questionnaire and has not been audited by ITU. The questionnaire is presented as Annex 1 of this report. In addition, a feedback questionnaire was sent in December 2017, inviting CoEs to share some of their expectations and challenges in operating CoE activities. Answers provided in this feedback exercise were also considered in this report.

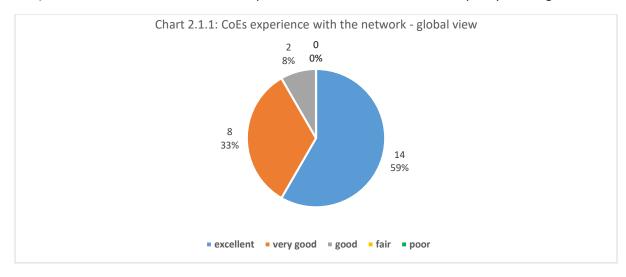
This report is structured as follows: Section 1 includes background of the CoE strategy and introduction of the report, Section 2 provides a view of the CoE network performance globally, Section 3 looks at the performance of the CoEs regionally, and Section 4 provides lessons learnt. This report has three Annexes. Annex 1 is the evaluation questionnaire, Annex 2 is the list of CoEs selected for this cycle, and Annex 3 is the performance evaluation of individual CoEs.

## 2. Performance of the CoE network globally

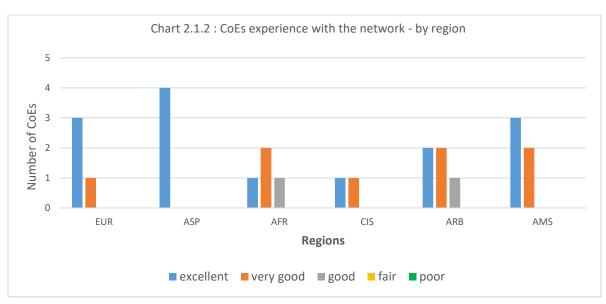
The evaluation of the CoE network's performance globally focused on the extent to which the network was able to achieve the objectives of the CoE strategy and increase the number of people trained in ICT topics in ITU member states. These objectives include the ability of the network to operate based on a self-sustainable model and provision of training on themes that are of priority to ITU. The evaluation also looked at issues that enabled the network to achieve its mandate and challenges faced.

#### 2.1 Overall experience with the network

The CoEs were generally pleased with the network and considered their experience as an ITU CoE positively. 92% of the respondents viewed their experience as either very good or excellent (Chart 2.1.1). This indicates that the CoEs have a positive view of the network as a capacity building initiative.

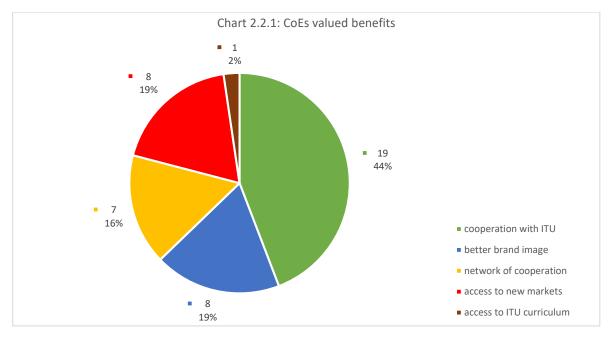


Looking at these results from a regional perspective (Chart 2.1.2) all CoEs in the Asia-Pacific (ASP) rate their experience as excellent. The Commonwealth of Independent States (CIS), Americas (AMS) and Europe (EUR) rate their experience as very good or excellent. However, the Africa (AFR) and Arab (ARB) regions have one CoE each that rated their experience as just good. A further analysis of those CoEs showed that their performance in the network in terms of delivery of training was lower than that of other CoEs in the network.

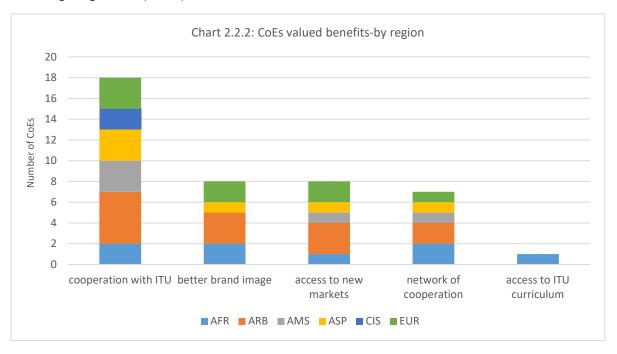


#### 2.2 Most valued benefits

The network offers a number of benefits that CoEs stated they valued. To establish which of the network offerings was the most valued by the CoEs, a select choice of answers was provided in the evaluation questionnaire with an option to select multiple answers. 44% of the CoEs indicated that they valued cooperation with ITU most, 19% valued brand image most and 19% valued access to new markets (Chart 2.2.1).

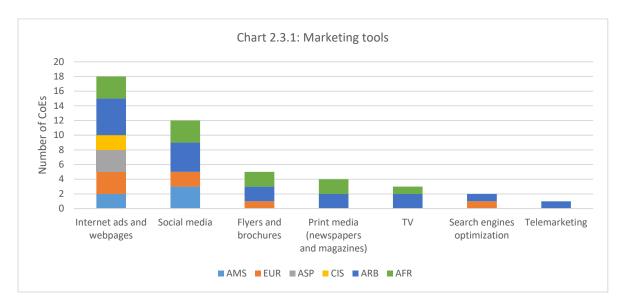


Looking at these results regionally, all regions reported cooperation with ITU as their most valued benefit. The second most valued benefit being better brand image and access to new markets. (Chart 2.2.2). The Africa region is the only region that indicated that they valued access to ITU curriculum. This region is the region that used most of the training materials developed by ITU compared to other regions. The training materials used by the CoEs in the region include the Spectrum Management Training Programme (SMTP) course materials.



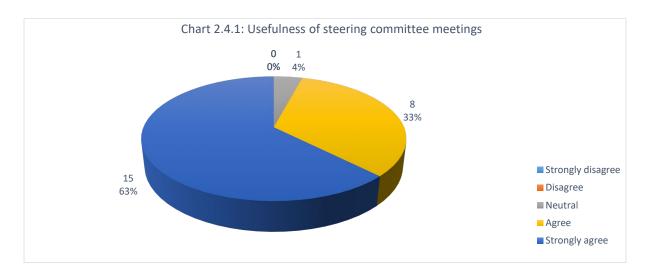
#### 2.3 Marketing and promotion

Different marketing strategies are used by CoEs to advertise their trainings. The most commonly used marketing strategy is promotional marketing which is used by 38% of the CoEs globally followed by business-to-customer marketing, at 32%. The CoEs also use diverse marketing tools that include print media, telemarketing, TV and social media, with Internet and webpages being the most commonly used marketing tool (Chart 2.3.1). The regions that use search engine optimization, internet ads and webpages, as well as social media have attracted the higher numbers of participants during this cycle. However most CoEs in the network cited marketing and promotion as a challenge that affected their delivery during the cycle.

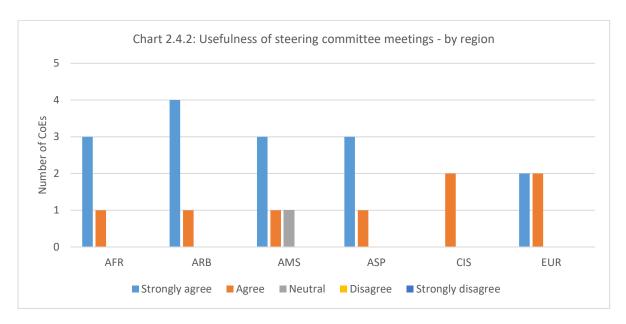


#### 2.4 Steering Committee meetings

For monitoring and governance of the CoEs, regional Steering Committees (SC) were established, which met once a year. 95% of the CoEs reported that the steering committee meetings they attended were useful (Chart 2.4.1). While attendance of the SC was financed by the CoEs and required that the they commit a few days to attend the meetings, many CoEs were able to send more than one representative to the meetings. Some of the CoEs that were not able to participate in the meeting contributed to the discussions by making inputs to the SC chairman's report or participated remotely where remote participation was arranged for by the hosting CoE.

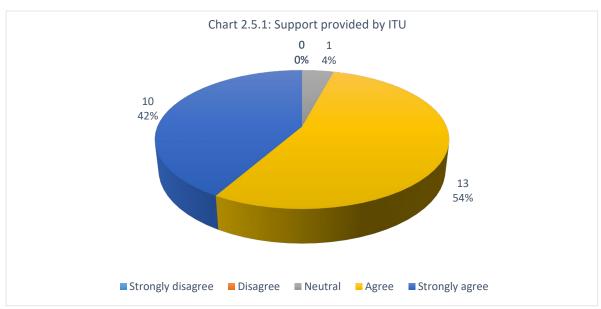


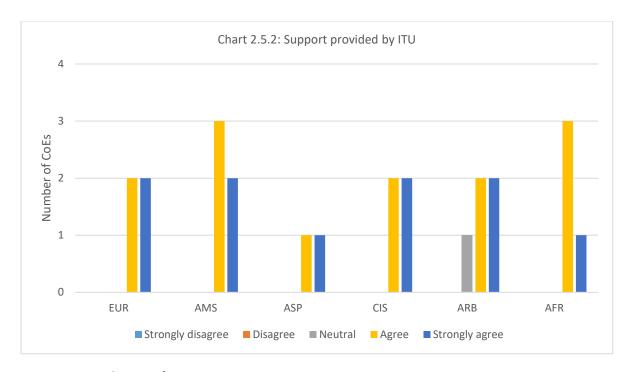
When compared across regions (Chart 2.4.2), the views of the CoEs in relation to the usefulness of the steering committee meetings differ. 100% of CoEs in the CIS, 80% in the Arab region, 75% in Africa and Asia-Pacific, 60% in the Americas and 50% in Europe strongly agreed to the usefulness of the steering committee meetings. Nevertheless, CoEs made a number of suggestions on how to improve SC meetings. These are considered in section 4 of this report.



#### 2.5 Support provided by ITU

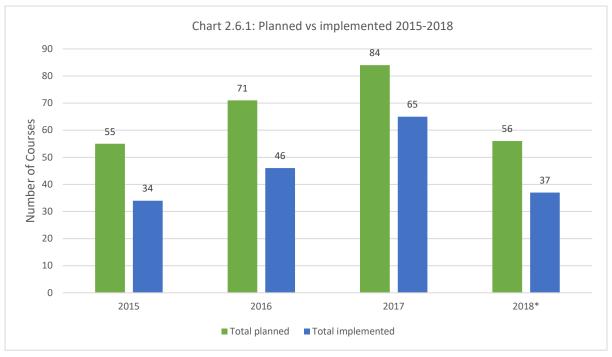
The CoEs appreciated the support they received from ITU during the cycle. 96% of the CoEs strongly agreed or agreed that ITU support was adequate (Chart 2.5.1). While the majority agreed that ITU support was adequate, one region, Arab region, had one CoE that remained neutral (Chart 2.5.2). However, CoEs in the network have expressed their wish to have increased support from ITU, especially with marketing and promotion of their courses, as well as promoting the ITU CoE brand in their regions.





### 2.6 Delivery of courses

The network delivered a total of 182 courses between 2015 and June 2018 against a planned total of 266. This is an average of 45 courses per year. Over the four years, the network delivered 68% of all planned courses. The number of courses implemented per year shows a steady increase, with 34 courses implemented in 2015, 46 in 2016, 65 in 2017 and already 37 implemented as at June 2018 (Chart 2.6.1). While the total number of courses increased over the years, CoEs observed that they could deliver more courses per year if they enhanced their marketing activities. Some CoEs also mentioned that focus on one priority area limits their market and therefore they could deliver more courses if they are allowed to operate in more than one priority area.



<sup>\*</sup>end June 2018

55% of courses implemented were delivered using face-to-face mode. However, the mode of delivery differs from region to region. Europe and the Americas regions report higher numbers of courses delivered using online methods while Africa, CIS, Arab and Asia-Pacific regions reported that most of their courses were delivered using face-to-face delivery mode (Table 2.6.1). The regions that delivered their courses using online delivery mode have recorded high numbers of participants per course. This could be because of the reduced costs of online learning since with this type of delivery mode, the cost of travel and lodging are removed from the training costs.

Table 2.6.1: Delivery mode

Regions	Mode of delivery	2015	2016	2017	2018*	Total (2015-2018)	
A.C. 2	Online	0	0	6	5	11	
Africa	Face-to-face	9	8	5	4	26	
Arab	Online	0	0	2	1	3	
Alab	Face-to-face	5	10	11	5	31	
Americas	Online	5	7	11	8	31	
Americas	Face-to-face	0	0	0	0	0	
Asia-Pacific	Online	1	2	3	1	7	
Asia-i acilic	Face-to-face	6	7	6	6	25	
CIS	Online	0	0	0	0	0	
CIS	Face-to-face	3	2	3	2	10	
Europe	Online	3	3	4	4	14	
Luiope	Face-to-face	2	7	14	1	24	

<sup>\*</sup>end June 2018

The number of courses implemented per region per year shows an increasing trend (Table 2.6.2). The Europe region delivered the highest number of courses during the cycle and CIS delivered the lowest. While Europe recorded the highest number of courses in overall, the region experienced a couple of cancellation of courses during the first two years (2015 and 2016). In 2017 the number of courses delivered in the region was highly increased by one CoE, through splitting one course into 10 separate classes. Table 2.6.2 shows that the CIS region implemented all the courses they planned for every year. It should be noted however that the region submitted only the courses they were ready to deliver. While the CIS region has fewer countries compared to other regions and fewer CoEs, they has one CoE that did not deliver courses throughout the cycle, which contributed to the regions already low numbers. It should be noted also that the Americas region also registered a substantial number of cancelled courses during the period. The Arab and Africa region had CoEs that were not operational and others who delivered low number of courses. The Asia-Pacific region did not charge fees for their courses, and they recorded a good number of courses and number of participants per course. The Asia-Pacific region also submitted only courses they were ready to deliver making it difficult to note how they truly performed against their planned.

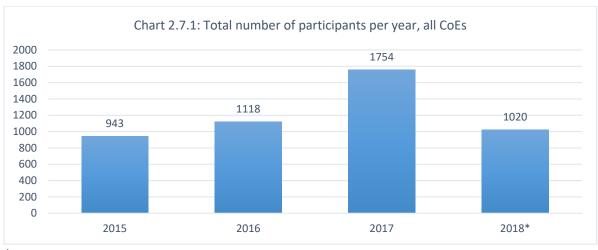
Table 2.6.2: Courses planned vs implemented by region

Regions	Courses	2015	2016	2017	2018*	Total (2015-2018)		
A.fi.a.a	Planned	13	18	20	13	64		
Africa	Implemented	9	8	11	9	37		
						<u> </u>		
Arab	Planned	8	10	21	11	50		
Alab	Implemented	5	10	13	6	34		
Americas	Planned	12	18	16	12	58		
Americas	Implemented	5	7	11	8	31		
Asia-Pacific	Planned	7	9	10	9	35		
Asia-Facilic	Implemented	7	9	9	7	32		
CIS	Planned	3	2	3	2	10		
CIS	Implemented	3	2	3	2	10		
Europe	Planned	13	14	15	9	51		
Luiope	Implemented	5	10	18	5	38		

<sup>\*</sup>end June 2018

#### 2.7 Number of participants

The network trained a total of 4846 participants between 2015 and June 2018. 61% of these participants were from outside the country of the training institutions delivering the trainings. The number of participants trained shows a steady growth over the four years (Chart 2.7.1). However, 63% of the CoEs in the network indicated that they were not pleased with the overall number of participants attending their courses. CoEs who were not satisfied with the number of participants in their courses reported inadequate marketing of the courses, payment problems and foreign currency restrictions as their main challenges. The problems encountered included local legislation relating to making payments to foreign accounts, limited access to credit cards and restrictions on purchase of foreign currency. The courses that were delivered using the face-to-face delivery mode show lower numbers of participants compared to those delivered online, with the exception of Asia-Pacific, where training fees are not charged.



<sup>\*</sup>end June 2018

Looking at different regions, the Asia-Pacific region trained the highest number of participants during this cycle, followed by Europe (Table 2.7.1). The Americas region trained the highest percentage of international participants which amounted to 92% of all participants. Europe and the Americas regions are the two regions that use online learning method intensively. CoEs in these regions have attracted participants from across their regions and globally. These regions deliver their courses using the ITU Academy platform. The CoEs in these regions have rated their view of the ITU Academy platform as Excellent.

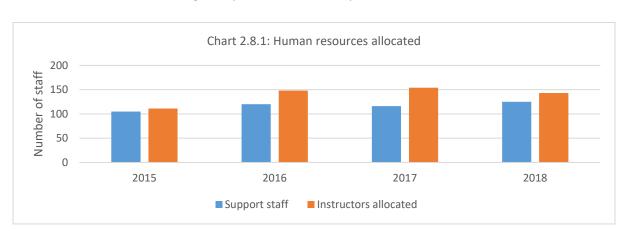
Table 2.7.1: Number of participants per region

Regions	Participants	2015	2016	2017	2018*	Total (2015-2018)	
A fui a a	Total	150	148	276	85	659	
Africa	International	50	17	44	21	132	
Arab	Total	79	199	309	123	710	
Alab	International	7	57	37	38	139	
						1	
Americas	Total	92	72	130	64	358	
Americas	International	85	59	128	60	332	
Asia-Pacific	Total	260	409	599	401	1669	
Asia-Facilic	International	151	289	362	342	1144	
CIS	Total	44	26	25	22	117	
CIS	International	24	9	0	3	36	
Europe	Total	318	264	415	325	1322	
Luiope	International	303	237	305	317	1162	

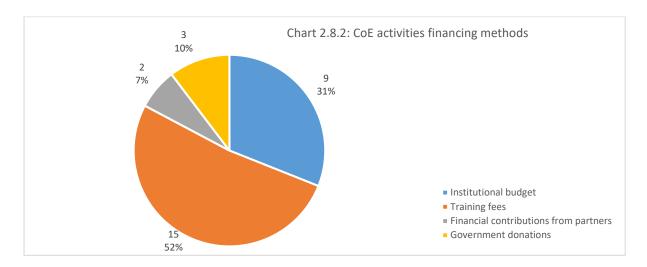
<sup>\*</sup>end June 2018

## 2.8 Resources for CoE operations

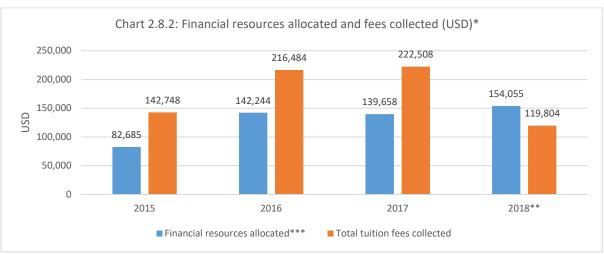
The CoE strategy is based on a self-sustainable model. CoEs allocate both human and financial resources to support the operations of the CoE. Based on the results of the evaluation questionnaire, the network allocates around 120 employees every year to implement CoE activities, both trainers and support staff. While the support staff allocated would normally be employees of the institution, instructors come from a variety of sources. CoE allocate instructors from their own members of staff and also recruit some, both regionally and internationally.



CoEs generate revenues through charging fees for training. However, there are CoEs that do not charge fees and receive funding from external sources such as governments and donor agencies. When asked how they finance the costs of CoE activities, 52% of CoEs in the network indicated that they finance the activities through training fees, 31% finance their activities though institutional budgets and 17% finance their activities through Government donations and partner contributions (Chart 2.8.2). The CoEs that charge fees, but reported that they finance their activities through institutional budgets, Government support or partner contributions, stated that the fees they collect are included into the main budget accounts of their institutions, and not reserved exclusively for CoE activities.



The CoE network collected training fees amounting to a total of USD \$701,544.00 during the 2015-18 cycle. In general, CoEs generate higher revenue from tuition fees charged than the amount they invest in the CoE operations per year (Chart 2.8.2). This is an indication that the self-sustainable model through collection of fees can be a viable model for the network. CoEs have noted a number of challenges relating to collection of fees by ITU. Where the fee collection arrangement was a challenge due to national legislation or other issues, ITU made alternative arrangements with the CoE affected. The financial investments and revenues reported by the Asia-Pacific region are not included in this chart since the CoEs in the region receive Government and donor funding for their operations and do not charge training fees.



<sup>\*</sup>does not include Asia-Pacific region

<sup>\*\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*\*</sup>as reported by CoEs

## 3. Regional performance

The evaluation of the CoE performance at the regional level focuses on the extent to which the CoEs were able to deliver on their mandate as a region. The evaluation looks at the experiences of the CoEs during this cycle, their performance in relation to training delivery, financial performance and viability of the CoE model in each region. CoEs were asked to provide information on the human and financial resources allocated to the CoE operations as well as revenues collected from training fees charged. The information on financial resources allocated by CoEs provided in this section is based on what the CoEs reported and has not been audited by ITU. It should be noted that some CoEs did not charge any tuition fees but financed their activities from other sources such as Government funding.

## 3.1 Africa region

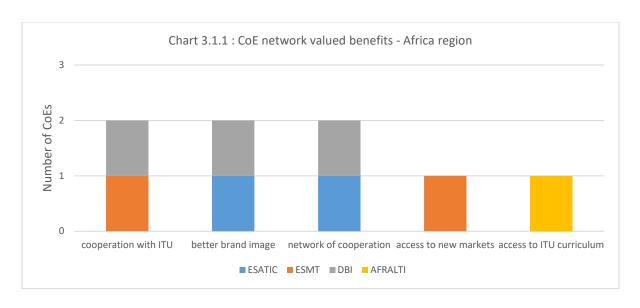
For the current cycle (2015-2018), six institutions were selected as CoEs for the Africa region, to deliver training in six different priority areas (Table 3.1.1). Two CoEs, Telkom South Africa and University of Rwanda, did not deliver any course under the ITU CoE framework during this cycle. These CoEs did not participate in the steering committee meetings, and did not complete the end-of-cycle evaluation questionnaire. For this reason, the results presented in this section are a compilation of the performance of the four CoEs in the region that delivered courses and responded to the questionnaire.

Table 3.1.1: List of CoEs in the Africa region

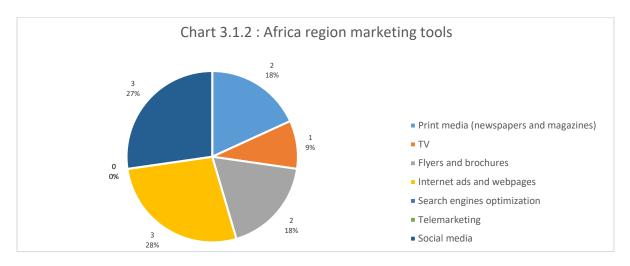
CoE	Country	Priority Area
African Advanced Level Telecommunications Institute	Kenya	Spectrum Management Broadband Access
Digital Bridge Institute	Nigeria	Policy and Regulation
Ecole Superieure Africaine des Technologies de l'information et de la Communication	Ivory Coast	Cybersecurity
Ecole Superieure Multinationale des Telecommunications	Senegal	Broadband Access Digital Broadcasting
Telkom South Africa	South Africa	ICT Applications and Services
University of Rwanda	Rwanda	Cybersecurity

#### **Experience as a CoE**

CoEs in the Africa region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, the Africa region had the lowest percentage of CoEs that strongly agreed to the statement that ITU support was adequate. The region valued cooperation with ITU, cooperation with others in the network, as well as access to ITU curriculum (Chart 3.1.1). Cooperation with ITU is the most valued benefit of the network globally, and the most popular in the Africa region as well.



In relation to marketing and promotion, the most commonly used strategy in the region is business-to-customer marketing, followed by business-to-business marketing. This is different from the most commonly used strategy by other CoEs in the network, which is promotional marketing. The tools that are used for marketing in the region are very diverse, with social media, Internet and webpages being the most commonly used tools (Chart 3.1.2). These tools are also the most commonly used by the network globally.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 37 training courses were implemented in the Africa region against a planned target of 64 courses, as at June 2018 (Table 3.1.2). This represents an implementation level of 57% against the planned activities for the region. This region's level of implementation is lower than the global which is at 68%. In relation to implementation of courses by CoEs globally, the Africa region contributed 20% of all courses delivered. The courses were implemented over the years 2015 -2018, and show an increase in the number of courses implemented each year. CoEs in the region delivered most of their courses using face-to-face delivery mode, which was used for 74% of the courses delivered. A total of 659 participants were trained, of which 80% were national participants and 20%

were from outside the respective countries of each CoE. CoEs in the region observed that inadequate marketing of courses is affecting the number of participants they attract per course. They cited enhancement of the CoE brand as well as strategic marketing as some of the strategies that could be used to increase the number of participants in their courses.

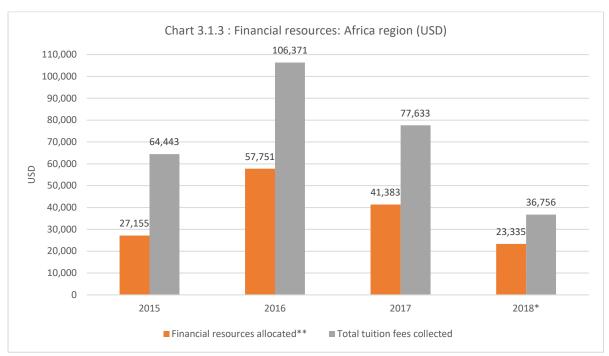
Table 3.1.2: Implementation of courses – Africa Region

		2015	2016	2017	*2018	Total (2015-2018)
Courses	Planned	13	18	20	13	64
Courses	Implemented	9	8	11	9	37
Number of	Total number of	150	148	276	85	659
	participants					
participants (all courses)	Number of international	50	17	44	21	132
(an courses)	participants					

<sup>\*</sup>end of June 2018

#### **Resources**

In the Africa region, CoEs allocated an average of 15 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly through institutional budget and training fees. CoEs in the region collected training fees amounting to USD285,203 during the current cycle. This constitutes 41% of training fees collected by the network globally. The fees collected each year have consistently been higher than the financial investment during the same year (Chart 3.1.3). This shows that the network's model of self-sustainability through charging fees for training, has been working well in the region.



<sup>\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*</sup>as reported by CoEs

## 3.2 Americas region

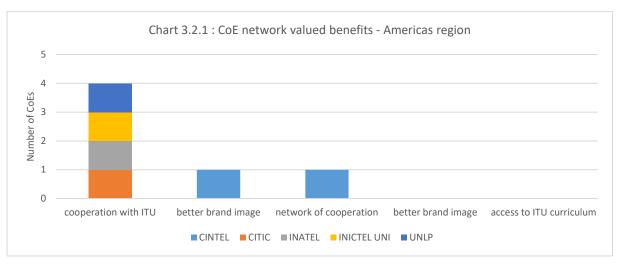
For the current cycle (2015-2018), six institutions were selected as CoEs for the Americas region, to deliver training in six different priority areas (Table 3.2.1). Two CoEs, The International Center Foundation for Scientific Research in Telecommunications, Information Technologies and Communications (CITIC) and The National University of La Plata (UNLP) delivered only one course each during the cycle. Furthermore, the Centro de Capacitación en Alta Tecnología Para América Latina y el Caribe (CCAT-LAT) delivered only two courses in the four years and did not complete the end-of-cycle evaluation questionnaire. For this reason, while the results in this report covers the performance of all the six CoEs in the region, the section on the views of the CoEs does not include feedback from CCAT-LAT.

Table 3.2.1: List of CoEs in the Americas region

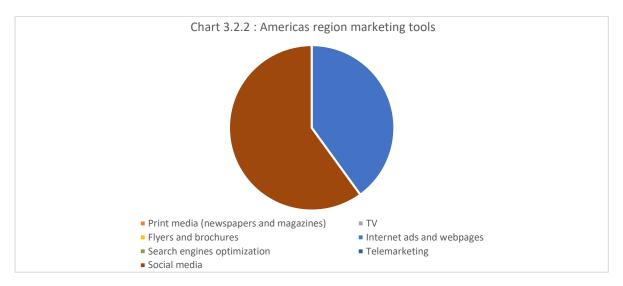
CoE	Country	Priority Area
Centro de Capacitación en Alta Tecnología para Latino América y el	Argentina	ICT Applications
Caribe (CCAT LAT)		and Services
Centro de Investigación y Desarrollo en Tecnologías de la Información y	Colombia	Spectrum
las Comunicaciones (CINTEL)		Management
Centro Internacional de Investigación Científica en	Ecuador	ICT and Climate
Telecomunicaciones, Tecnologías de la información y las		Change Mitigation
comunicaciones (CITIC)		and Adaptation
Instituto Nacional de Investigación y Capacitación de	Peru	Broadband Access
Telecomunicaciones – Universidad Nacional de Ingeniería (INICTEL UNI)		
Instituto Nacional de Telecomunicações (INATEL)	Brazil	Digital
		Broadcasting
Universidad Nacional de la Plata (UNLP)	Argentina	Cybersecurity

#### **Experience as a CoE**

CoEs in the Americas region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, there were more CoEs in the Americas region that agreed to the statement that ITU support was adequate than those that strongly agreed to the statement. The region valued cooperation with ITU, cooperation with others in the network, as well as access to new markets (Chart 3.2.1). Cooperation with ITU is the most valued benefit of the network globally, and the most popular in the Americas region as well.



In relation to marketing and promotion, the most commonly used strategy in the region is promotional marketing, followed by business-to-business marketing. Promotional marketing is the most commonly used strategy by the CoE network globally. The tools that are used for marketing in the region are social media as well as Internet and webpages (Chart 3.2.2). Internet and web pages is the most commonly used marketing tool by the network globally.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 31 training courses were implemented in the Americas region against a planned target of 58 courses, as at June 2018 (Table 3.2.2). This represents an implementation level of 58% against the planned activities for the region. This region's level of implementation is lower than the global which is at 68%. In relation to implementation of courses by CoEs globally, the Americas region contributed 18% of all courses delivered. The courses were implemented over the years 2015 -2018, and show an increase in the number of courses implemented each year. CoEs in the region delivered most of their courses using online delivery mode, which was used for 97% of the courses delivered. A total of 358 participants were trained, of which 8% were national participants and 92% were from outside the respective countries of each CoE. CoEs in the region observed that inadequate marketing of courses is affecting the number of participants they attract per course. They cited payment problems and foreign currency restrictions as other challenges that they faced during the cycle.

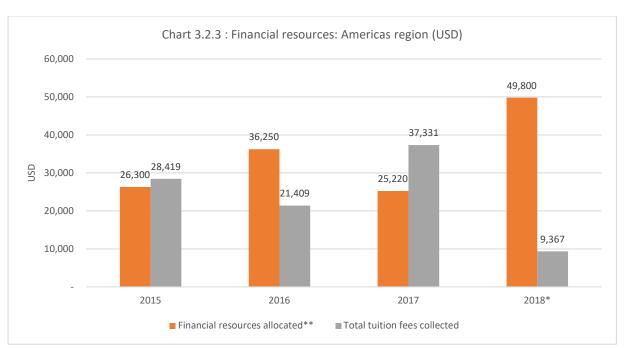
Table 3.2.2: Implementation of courses – Americas region

		2015	2016	2017	*2018	Total (2015-2018)
Caurage	Planned	12	18	16	12	58
Courses	Implemented	5	7	11	8	31
Number of	Total number of participants	92	72	130	64	358
participants (all courses)	Number of international participants	85	59	128	60	332

<sup>\*</sup>end of June 2018

#### **Resources**

In the Americas region, CoEs allocated an average of 10 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly through institutional budget and training fees. CoEs in the region collected training fees amounting to USD96,525 during the current cycle. This constitutes 13% of training fees collected by the network globally. In general, the fees collected each year have been lower than the financial investment during the same year (Chart 3.2.3). This shows that the network's model of self-sustainability through charging fees for training, has been a challenge in the region.



<sup>\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*</sup>as reported by CoEs

## 3.3 Arab region

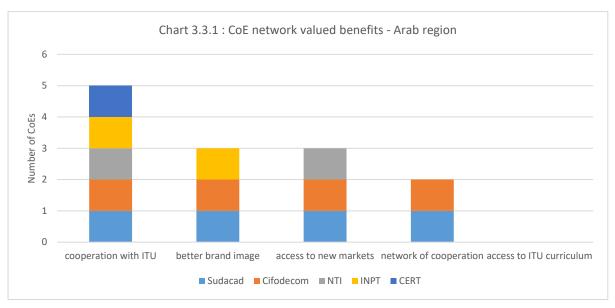
For the current cycle (2015-2018), six institutions were selected as CoEs for the Arab region, to deliver training in six different priority areas (Table 3.3.1). One CoE, Telecommunications Regulatory Authority (TRA) did not sign the cooperation agreement to confirm its status as an ITU CoE and did not participate in the activities of the network throughout the cycle. For this reason the results provided in this section are for the five CoEs in the Arab region that were operational.

Table 3.3.1: List of CoEs in the Arab region

CoE	Country	Priority Area
Centre d'Etudes et de Recherche des Télécommunications	Tunisia	Conformance and
(CERT)		Interoperability
Institut National des Postes et Télécommunications (INPT)	Morocco	Policy and Regulation
National Telecommunication Institute (NTI)	Egypt	Spectrum Management
Sudatel Telecommunications Academy-SUDACAD	Sudan	ICT Applications and Services
Telecommunications Regulatory Authority (TRA)	Bahrain	Capacity Building in Internet
		Governance
The Center of Information, Training, Documentation, and	Tunisia	Broadband Access
Studies in Communication Technologies (CIFODE'COM)		

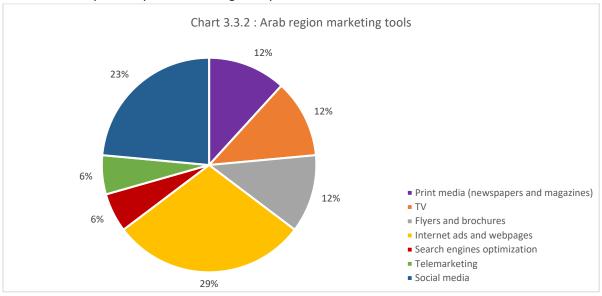
#### **Experience as a CoE**

CoEs in the Arab region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, the Arab region is the only region that had a CoE rating their experience as neutral. The rest of the CoEs in the network either agreed or strongly agreed that support from ITU was adequate. The region valued cooperation with ITU, better brand image, as well as access to new markets (Chart 3.3.1). Cooperation with ITU is the most valued benefit of the network globally, and the most popular in the Arab region as well.



In relation to marketing and promotion, the most commonly used strategy in the region is business-to-customer marketing, followed by promotional marketing. The most commonly used strategy by other CoEs in the network, which is promotional marketing which is the second most used strategy in the Arab region. The tools that are used for marketing in the region are very diverse, with social media,

Internet and webpages being the most commonly used tools (Chart 3.3.2). These tools are also the most commonly used by the network globally.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 34 training courses were implemented in the Arab region against a planned target of 50 courses, as at June 2018 (Table 3.3.2). This represents an implementation level of 68% against the planned activities for the region. This region's level of implementation is the same as the global, which is at 68%. In relation to implementation of courses by CoEs globally, the Arab region contributed 19% of all courses delivered. The courses were implemented over the years 2015 -2018, and show an increase in the number of courses implemented each year. CoEs in the region delivered most of their courses using face-to-face delivery mode, which was used for 92% of the courses delivered. A total of 710 participants were trained, of which 81% were national participants and 19% were from outside the respective countries of each CoE. CoEs in the region cited the following three challenges that affected their number of participants in their training; payment problems and foreign currency restrictions, inadequate marketing and recognition of CoE brand in the region.

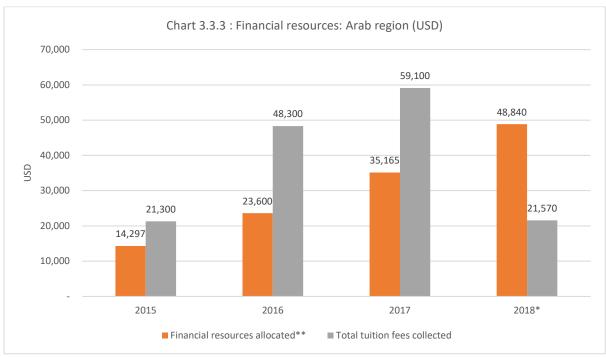
Table 3.3.2: Implementation of courses - Arab region

		2015	2016	2017	*2018	Total (2015-2018)
Courses	Planned	8	10	21	11	50
Courses	Implemented	5	10	13	6	34
Number of	Total number of participants	79	199	309	123	710
participants (all courses)	Number of international	7	57	37	38	139
(an courses)	participants					

<sup>\*</sup>end of June 2018

#### Resources

In the Arab region, CoEs allocated an average of 8 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly through institutional budget and training fees. CoEs in the region collected training fees amounting to USD150,269 during the current cycle. This constitutes 21% of training fees collected by the network globally. The fees collected each year have consistently been higher than the financial investment during the same year (Chart 3.3.3). This shows that the network's model of self-sustainability through charging fees for training, has been working well in the region.



<sup>\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*</sup>as reported by CoEs

## 3.4 Asia-Pacific region

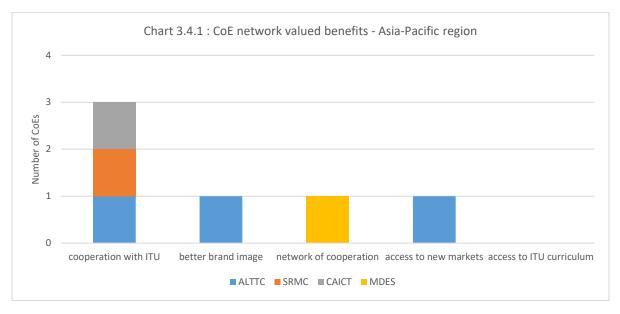
For the current cycle (2015-2018), six institutions were selected as CoEs for the Asia-Pacific region, to deliver training in seven different priority areas (Table 3.4.1). Two CoEs, The national Information Society Agency, Republic of Korea, and The international Multilateral Partnership against Cyber Threats, Malaysia, withdrew from the network. For this reason, the results in this section are for the four CoEs that were part of the network during the 2015-2018 cycle.

Table 3.4.1: List of CoEs in the Asia-Pacific region

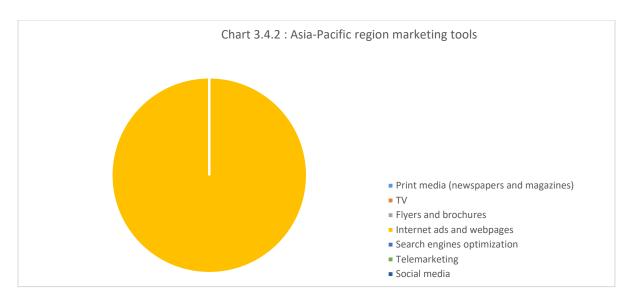
CoE	Country	Priority Area
Advanced Level Telecoms Training Centre (ALTTC)	India	Broadband Access
China Academy of Telecommunications Research (MIIT)	China	Conformance and Interoperability
National Information Society Agency (NIA)	Republic of Korea	Policy and Regulation
State Radio Monitoring Centre (SRMC)	China	Spectrum Management
The International Multilateral Partnership Against Cyber Threats (IMPACT)	Malaysia	Cybersecurity
TOT Academy – Ministry of Information and Communication Technology (MICT)	Thailand	Policy and Regulation; Broadband Access

#### Experience as a CoE

CoEs in the Asia-Pacific region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, 50% of CoEs in the region region agreed to the statement that ITU support was adequate while the other 50% strongly agreed. The most valued benefit of the network in the region was cooperation with ITU (Chart 3.4.1) which is the most valued benefit of the network globally as well.



In relation to marketing and promotion, the most commonly used strategy in the region is business-to-business marketing followed by promotional marketing. Promotional marketing is the most commonly used strategy in the network. The tool that is used for marketing in the region Internet and webpages (Chart 3.4.2). This tools is also the most commonly used by the network globally.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 32 training courses were implemented in the Asia-Pacific region against a planned target of 35 courses, as at June 2018 (Table 3.4.2). This represents an implementation level of 91% against the planned activities for the region. This region's level of implementation is higher than the global which is at 68%. In relation to implementation of courses by CoEs globally, the Asia-Pacific region contributed 17% of all courses delivered. The courses were implemented over the years 2015 -2018. CoEs in the region delivered most of their courses using face-to-face delivery mode, which was used for 77% of the courses delivered. A total of 1669 participants were trained, of which 32% were national participants and 68% were from outside the respective countries of each CoE. CoEs in the region were pleased with their performance for this cycle.

Table 3.4.2: Implementation of courses – Asia-Pacific region

		2015	2016	2017	*2018	Total (2015-2018)
Courses	Planned	7	9	10	9	35
Courses	Implemented	7	9	9	7	32
Number of	Total number of participants	260	409	599	401	1669
participants (all courses)	Number of international participants	151	289	362	342	1144

<sup>\*</sup>end of June 2018

#### Resources

In the Asia-Pacific region, CoEs allocated an average of 20 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly Government funding and donor support. In instances where fees were collected, the region collected training fees amounting to USD 19,649 during the current cycle. This constitutes 2% of training fees collected by the network globally. The Government

funding and donor support fees received by the CoEs is reflected as part of financial resources allocated in the below chart (Chart 3.4.3).



<sup>\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*</sup>as reported by CoEs

## 3.5 Commonwealth of Independent States Region (CIS)

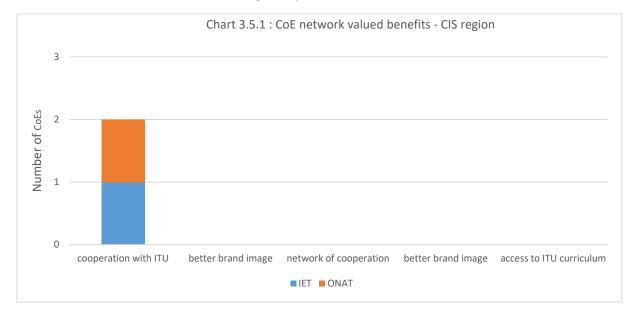
For the current cycle (2015-2018), three institutions were selected as CoEs for the CIS region, to deliver training in six different priority areas (Table 3.5.1). One CoE, Moscow Technical University of Communications and Informatics (MTUCI) did not delver any course during the cycle. They also did not complete the end-of-cycle questionnaire. For this reason, the results in this section do not include information on MTUCI.

Table 3.5.1: List of CoEs in the CIS region

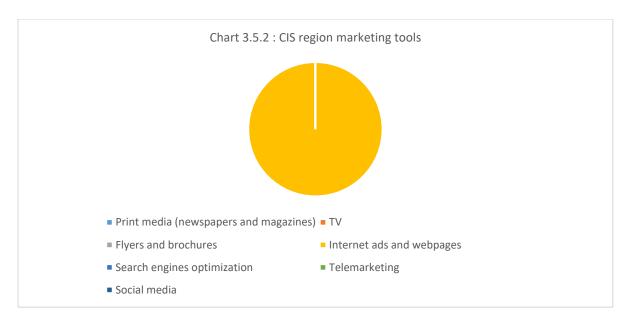
CoE	Country	Priority Area
Kyrgyz State Technical University (KSTU)	Kyrgyz Republic	Broadband Access; e-Waste
Moscow Technical University of Communications and	Russian	Cybersecurity;
Informatics (MTUCI)	Federation	ICT Applications and Services
Odessa National Academy of Telecommunications (ONAT)	Ukraine	Policy and Regulation;
		Digital Broadcasting

#### **Experience as a CoE**

CoEs in the CIS region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, one CoE agreed to the statement that ITU support was adequate while the other CoE strongly agreed to the statement. The region valued cooperation with ITU (Chart 3.5.1) which is the most valued benefit of the network globally.



In relation to marketing and promotion, the strategies that are used in the region are business-to-customer and promotional marketing. The most commonly used strategy by other CoEs in the network is promotional marketing, which is also commonly used in the region. The tool that is used for marketing in the region is Internet and webpages (Chart 3.5.2). This tool is also the most commonly used by the network globally.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 10 training courses were implemented in the CIS region against a planned target of 10 courses, as at June 2018 (Table 3.5.2). This represents an implementation level of 100% against the planned activities for the region. This region's level of implementation is above the global which is at 68%. In relation to implementation of courses by CoEs globally, the CIS region contributed 5% of all courses delivered. The courses were implemented over the years 2015 -2018, and show a fluctuating trend of the number of courses implemented each year. CoEs in the region delivered most of their courses using face-to-face delivery mode, which was used for all the courses delivered. A total of 117 participants were trained, of which 70% were national participants and 30% were from outside the respective countries of each CoE. CoEs cited payment problems and foreign currency restrictions as one of the challenges they experienced during the cycle.

Table 3.5.2: Implementation of courses - CIS region

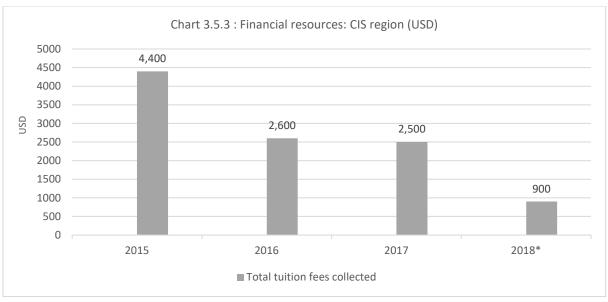
		2015	2016	2017	*2018	Total (2015-2018)
Courses	Planned	3	2	3	2	10
Courses	Implemented	3	2	3	2	10
Number of	Total number of participants	44	26	25	22	117
participants (all courses)	Number of international participants	24	9	0	3	36

<sup>\*</sup>end of June 2018

#### Resources

In the CIS region, CoEs allocated an average of 5 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly through institutional budget and training fees. CoEs in the region

collected training fees amounting to USD 10,400 during the current cycle. This constitutes 1% of training fees collected by the network globally. The fees collected each year have been declining over the years (Chart 3.5.3). The region did not provide information on financial resources they allocated to CoE activities during the cycle.



<sup>\*</sup>end of June 2018

## 3.6 Europe Region

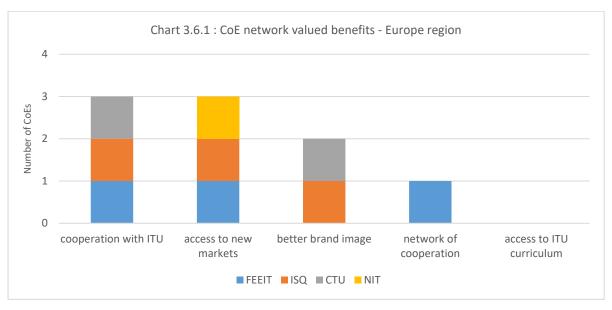
For the current cycle (2015-2018), five institutions were selected as CoEs for the Europe region, to deliver training in seven different priority areas (Table 3.6.1). One CoE, Technische Universitat Chemnitz (TUC) did not deliver any courses during the cycle and did not complete the end-of-cycle evaluation questionnaire. For this reason eh results in this section are for the four CoEs in the region that were operational.

Table 3.6.1: List of CoEs in the Europe region

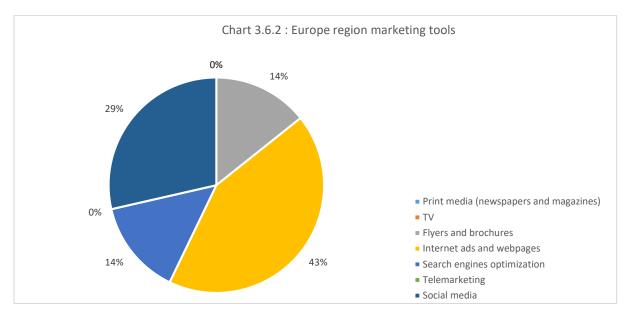
CoE	Country	Priority Area
Czech Technical University in Prague, Faculty of Electrical Engineering (CTU)	Czech Republic	Cybersecurity
Faculty of Electrical Engineering and Information Technologies, Ss. Cyril and Methodius University in Skopje (FEEIT)	The Former Yugoslav Republic of Macedonia	Broadband Access
Institute for Technology and Quality (ISQ)	Portugal	e-Waste; Conformance and Interoperability
National Institute of Telecommunications (NIT)	Poland	Capacity Building in Internet Governance
Technische Universitat Chemnitz (TUC)	Germany	Cybersecurity; Broadband Access

#### Experience as a CoE

CoEs in the Europe region considered their experience as ITU CoEs as good. The region also expressed positive views in relation to their experiences using the ITU Academy platform. In relation to support received from ITU, 50% of CoEs in the region agreed to the statement that ITU support was adequate while other 50% strongly agreed to the statement. The region valued cooperation with ITU and access to new markets (Chart 3.6.1). Cooperation with ITU is the most valued benefit of the network globally, and one of the most popular in the Europe region as well.



In relation to marketing and promotion, the most commonly used strategy in the region is business-to-customer marketing and promotional marketing. Promotional marketing is the most commonly used strategy in the network. The tools that are used for marketing in the region are diverse, with Internet and webpages being the most commonly used (Chart 3.6.2). These tools are also the most commonly used by the network globally as well.



The region considered the governance structure of the network as beneficial. CoEs indicated that the steering committee meetings were useful. These views are similar to the views of the network globally.

#### **Training delivery**

During the 2015-2018 CoE cycle, 38 training courses were implemented in the Europe region against a planned target of 51 courses, as at June 2018 (Table 3.6.2). This represents an implementation level of 74% against the planned activities for the region. This region's level of implementation is higher than the global which is at 68%. In relation to implementation of courses by CoEs globally, the Europe region contributed 21% of all courses delivered. The courses were implemented over the years 2015-2018, and show an increase in the number of courses implemented each year. CoEs in the region delivered most of their courses using online delivery mode, which was used for 72% of the courses delivered. A total of 1322 participants were trained, of which 13% were national participants and 87% were from outside the respective countries of each CoE. CoEs in the region observed that inadequate marketing of courses is affecting the number of participants they attract per course. They cited enhancement of the CoE brand as one of the strategies that could be used to increase the number of participants in their courses.

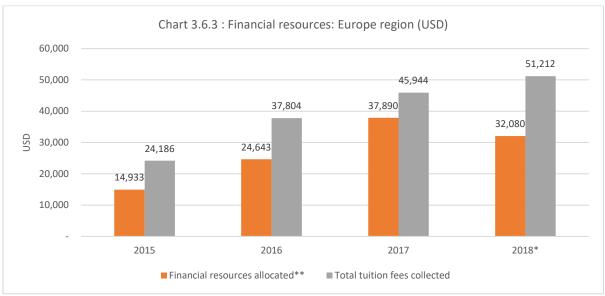
Table 3.6.2: Implementation of courses - Europe region

		2015	2016	2017	*2018	Total (2015-2018)
Courses	Planned	13	14	15	9	51
Courses	Implemented	5	10	18	5	38
Number of	Total number of participants	318	264	415	325	1322
(all courses)	Articipants Number of international		237	305	317	1162

<sup>\*</sup>end of June 2018

#### Resources

In the Europe region, CoEs allocated an average of 8 instructors every year to focus on the activities of the network. The CoEs also allocated other members of staff, from supporting functions such as finance, human resources and administration to support the running of the CoE activities. The CoEs in the region finance their activities mainly through institutional budget and training fees. CoEs in the region collected training fees amounting to USD159,146 during the current cycle. This constitutes 22% of training fees collected by the network globally. The fees collected each year have consistently been higher than the financial investment during the same year (Chart 3.6.3). This shows that the network's model of self-sustainability through charging fees for training, has been working well in the region.



<sup>\*</sup>end of June 2018 for tuition fees collected

<sup>\*\*</sup>as reported by CoEs

## 4. Challenges and lessons learnt

The analysis of the CoE network performance during the cycle 2015-2018 showed that there are major differences when it comes to the implementation of training activities across the network, in terms of number of courses delivered, number of participants, and share of international participants. In order to strengthen and improve the performance of the network, it is important to examine and identify reasons behind low and high performance, and based on those, make recommendations on the way forward.

The evaluation revealed a number of challenges the CoEs were facing while implementing their training activities, which should be addressed to the extent possible in the forthcoming cycle (2019-2022).

These challenges, and some of the related lessons learnt, include the following:

Overall, the CoE network implemented 70% of its activities planned at the beginning of each year. This implementation level varies considerably between individual CoEs, and across and within regions. The main reason for the cancellation of planned courses is the low number of registrations for a particular course, especially in the case of face-to-face courses. This also reflects challenges in attracting participants from countries outside the CoE locations.

The cancellation of planned courses has contributed to the overall low number of training courses offered by the CoE network: on average, each CoE implemented 1.75 courses per year, with a range from 0-10 courses per year. The high number of ten courses (in one CoE in 2017) is an exception, however, since the same course was offered repeatedly to different staff of one particular Government office.

As a result, the overall number of people trained through the network was modest, with a total of 4'846 participants over the 4-year period. However, there are significant differences in terms of number of participants per training course delivered, ranging from just four to over 300.

While the number of participants in face-to-face training courses was generally lower than those in elearning courses (for obvious reasons), some face-to-face courses were successful in attracting large numbers, including from an international audience.

The low number of participants in some of the courses and the low number of courses implemented by some CoEs raises questions concerning the cost-effectiveness of the network. This affects not only the CoEs as the delivery institutions but also the ITU secretariat in terms of the administrative work and resources involved in maintaining and supporting the CoE operations, for example for registration, payment, management of the e-learning platform and courses, evaluation, certification etc.

Some face-to-face courses were run on a non-fee paying basis, and most of these courses attracted larger number of participants. In the same vein, some of the courses that were cancelled had very high fee tags attached to them. This raises the question whether the issue of fees and the amount of such fees has a significant bearing on the levels of participation in CoE training courses.

In order to address those issues and benefit from the lessons learnt, it is useful to look at good performers, best practices and success factors. Here are several points to consider:

First of all, the human and financial resources allocated to the CoE activities (by the CoE hosting institution) play a critical role. The level of engagement of the CoE focal point and his/her team can significantly impact the success of the activities. For example, active outreach, marketing and promotion of CoE courses (including building contact databases, using Internet-based tools etc.) is essential to attracting participants. Insufficient marketing and promotion was cited by CoEs as the

most important challenge they were facing as a training provider during the cycle. At the same time, successful CoEs included those that engaged heavily in promoting their courses among a wide audience, including from other regions.

Second, the topics of the training courses offered may not correspond to market demand. Since each CoE was allocated one (or two) priority areas of their choice in which they were expected to deliver training, the room for maneuver was limited. Several CoEs pointed out that with the fast change of technology, there should be scope for offering training in areas other than the priority area selected at the beginning of the cycle and that are high in demand.

Third, stronger support to individual CoEs both from the network itself and from ITU could increase the performance. During the past cycle, most CoEs operated on their own, with little interaction with other CoEs. One notable exception is the collaboration between CoE Poland and CoE Macedonia, which led to the delivery of joint training courses which were highly successful. Several CoEs suggested that increased collaboration in the network (within and across regions) would be beneficial to their operations and lead to an increase in activities.

The support provided by ITU to the CoEs was overall seen positively and appreciated, in particular support provided by the Regional Offices and the ITU Academy/HQ. The evaluation showed, however, that with stronger engagement and facilitation by ITU, the performance of the network could be enhanced. CoEs need to submit the reports of each training course to ITU on a regular basis in order to facilitate ITU's guidance and support.

Finally, and linked to the last point, the effectiveness of the regional Steering Committees in terms of performance evaluation and guidance to CoEs should be reviewed. During the past cycle, SCs were only active during the annual meeting, with no activities in between meetings. Although CoEs were invited to the SC meetings, they were not full members of SCs. The agenda of SC meetings were more political and less operational, not providing enough room for CoEs to learn from each other, build partnerships and share best practices. CoEs pointed out that SCs could provide useful opportunities for them to share knowledge and experience, and strengthen collaboration.

#### Recommendations on the way forward

In view of the above challenges faced by some CoEs, and lessons learnt, the following recommendation should be considered for enhancing and strengthening the performance of the CoE network during the next cycle.

#### Recommendations to CoEs:

- Ensure commitment to the CoE operation at the top level of the institution
- Ensure sufficient allocation of resources (human and financial) for CoE operations
- CoE focal point to be pro-active
- Strengthen outreach, marketing and promotional activities of CoE
- Familiarize yourself with the CoE concept and operations (see document Operational Processes and Procedures for the ITU Centers of Excellence Network (OPP) 2018) to understand the functioning of the network and its self-sustainability model
- Develop collaborations with other CoEs for joint implementation of activities and to pool resources
- Submit reports on training activities at the end of each training as prescribed in the OPP 2018
- Design training curricula and determine tuition fee levels that are adapted to market demand
- Consider the introduction of e-learning courses (using the ITU Academy)

#### Recommendations to ITU:

- Strengthen the branding of the CoE network by promoting it as a key ITU delivery partner in capacity development and training
- Provide concrete operational guidelines to CoEs starting the new cycle, based on the OPP 2018
- Allow CoEs to deliver training in more than one priority area (while keeping in mind that they
  are expected to deliver courses in each area), as well as in additional topics that may emerge
  during the cycle
- Encourage and strengthen cooperation among CoEs, within and across regions (e.g. Europe-CIS, Arab-Africa)
- Reinforce facilitation/guidance/follow-up from ITU for under-performing CoEs; carry out more
  regular evaluations during the cycle and give more visibility to the discussion of performance;
  highlight outstanding performers in the network. In this respect, reinforce theannual
  performance evaluation of each CoE as provided for in the OPP 2018 to ensure corrective
  actions are taken.
- Ensure that the newly developed ITU Academy platform will facilitate/lower some of the administrative burden related to the CoE network, and will facilitate the promotion of courses, the management of contact databases etc.
- Deliver training in marketing and promotion to CoEs
- Promote the use of the ITU Academy for e-learning courses (including training for CoEs)
- Strengthen Steering Committees and make them more useful for CoEs (see below)

#### Recommendations to SC:

- Make CoEs full members of the SCs
- Reorient the agenda of SC meetings towards the CoE operations, challenges, and best practices (CoEs to prepare and present their own report at SC meetings etc.)
- Set clear targets for annual training activities to be achieved in the network
- Organize SC activities during the year (not only one annual meeting), for example regular correspondence from the Chair to SC members, online meetings as necessary etc.
- Organize online meetings among CoEs during the year (by region) and one global online meeting annually (to exchange experiences, challenges and successes)

# **Annex 1 Performance evaluation questionnaire**

Centers of Excellence 2015-2018 Cycle										
Performance evaluation questionnaire										
Legend:	yellow fields are dropdown menus, click on the activate menus	em to								
	grey fields are text boxes, both text and numer	ical								
	values can be entered									
A.	Official name of institution:									
	B									
В.	Region:									
C.	Category of institution									
C.	Category of motitation									
D.	Please specify the priority area(s) for your									
<u> </u>	CoE for the cycle 2015-2018:									
	1. The	Centers of Excellence experience								
1.1.	How would you rate your experience as a									
1.1.	Centre of Excellence during the cycle 2015-									
	2018? Please rank on the scale of 1-5 with 1 being the lowest (poor) and 5 being the									
	highest (excellent)?									
1.2.	What did you value most as a Center of									
	Excellence? (multiple selections are possible)									
	(									
1.3.	If you answered "other", please specify:									
1.4.	Which marketing types did you use to promote your courses?									
	(multiple selections are possible)									
1.5.	If you answered "other", please specify:									
1.0	Which marketing tools did your institution									
1.6.	use to attract participants in training									
	courses? (multiple selections are possible)									
1.7.	Were you satisfied with the level of									
	participation in your training activites?									
1.8.	If your previous answer was "no", what was									
	the biggest challenge for you as a CoE to achieve higher participation.									
<u>'</u>										

1.9.	If you answered	d "other", p	lease speci	ify:		
1.10.	How do you even					
	of 1-5 with 1 b	eing the lov	west (poor)			
	being the highe	st (exceller	nt).			
				2.	Delivery of	training activi
2.1.	Please fill in the					
	more than one information by			rovide		
	,	<b>,</b>				
	Priority area					
	1:					
	Number of tr	aining cour	ses implem	ented di	uring the cyc	le 2015 to
			2018			
					2018	Total (2015-
	Year	2015	2016	2017	(end of	2018)
					June)	
	Planned*					0
	Implemented					0
	* as per Steerin Committee mee					
	committee met	ztii i g				
	Priority area					
	2:					
	Number of tr	aining cour	sas implam	ented di	uring the cyc	le 2015 to
	rumber of the	uning cour	2018		aring the cyc	
					2018	Total (2015-
	Year	2015	2016	2017	(end of	2018)
					June)	
	Planned*					0
	Implemented					0
	* as per Steerin Committee mee					
	committee mee	eung				
2.2.	Please fill in the	e table belo	w. If you h	ad	1	
	more than one	priority are	ea, please p		1	
	information by	priority are	d.			
	Priority area					
	1:					
	Number of	participant	ts trained d	luring the	e cycle 2015	to 2018
	Voor	2015	2016	2017	2018 (end of	Total (2015-
	Year	2015	2016	2017	(end of June)	(2015- 2018)
	Total					
	number of participants					0
	Number of					
	international					
	participants					

Priority area 2:

Number of participants trained during the cycle 2015 to 2018											
Year	2015	2016	2017	2018 (end of June)	Total (2015- 2018)						
Total number of participants					0						
Number of international participants					0						

2.3.				Delivery Mode					Pass	
	Year	Title of training course	Month of delivery	face- to- face 0=No	e- learning 1=Yes	Language	Total number of participants	Number of international participants	rate: 0-59% 60-79% 80-100%	Average satisfactio n level*
	2015									
	2016									
	2017									
	2018									

<sup>\*</sup>the total sum of the average evaluation score divided by the number of questions in the feedback form. For example, if there are 10 questions in the course evaluation form, take the average evaluation score of each question and divide it by 10.

3. Resources for CoE activities

3.1.	How did you fir	nance CoE a	activities?												
	_			_											
3.2.	If you answere	d "other", բ	olease speci	ify:											
3.3.	Please indicate resources alloc of the CoE activ generated.	ated to the	implement												
	Year	2015	2016	2017	2018										
	Human resources allocated (number of staff excluding instructors)														
	Financial resources allocated (in USD)														
	Total amount of the tuition fees collected from all the courses (in USD)*														
3.4.	* This amount s collected from p Please indicate to/hired for the the cycle period	the number delivery o	er of instruc	tors assi	gned	i.e. it sh	nould :	represe	ent 100%	of the t	uition 1	fees			
	Priority area 1:														
	Year	2015	2016	2017	2018 (up to end of June)										
	Number of trainings conducted														
	Number of in-house instructors assigned														

Number of national instructors hired											
Number of international instructors hired											
Priority area 2:											
Year	2015	2016	2017	2018 (up to end of June)							
Number of trainings conducted											
Number of in-house instructors assigned											
Number of national instructors hired											
Number of international instructors hired											
Please specif		es of the foo		for the							
Names of focal points	2015	2016	2017	2018							
				4. Governa	ance o	of th	the Co	СоЕ			
Please indicate Committee me											
Year	2015	2016	2017								
Number of delegates from your institution											

4.2.	The Steering Committee meetings were useful for the governance of the network in the region.	
	the region.	
4.3.	The support provided by ITU to the CoE network in the region was adequate.	

## Annex 2 List of CoEs (2015-2018)

Africa region	Country	Priority Area		
African Advanced Level Telecommunications Institute	Kenya	Spectrum Management Broadband Access		
Digital Bridge Institute	Nigeria	Policy and Regulation		
Ecole Superieure Africaine des Technologies de l'information et de la Communication	Ivory Coast	Cybersecurity		
Ecole Superieure Multinationale des Telecommunications	Senegal	Broadband Access Digital Broadcasting		
Telkom South Africa	South Africa	ICT Applications and Services		
University of Rwanda	Rwanda	Cybersecurity		
Americas region	Country	Priority Area		
Centro de Capacitación en Alta Tecnología para Latino América y el Caribe (CCAT LAT)	Argentina	ICT Applications and Services		
Centro de Investigación y Desarrollo en Tecnologías de la Información y las Comunicaciones (CINTEL)	Colombia	Spectrum Management		
Centro Internacional de Investigación Científica en Telecomunicaciones, Tecnologías de la información y las comunicaciones (CITIC)	Ecuador	ICT and Climate Change Mitigation and Adaptation		
Instituto Nacional de Investigación y Capacitación de Telecomunicaciones – Universidad Nacional de Ingeniería (INICTEL UNI)	Peru	Broadband Access		
Instituto Nacional de Telecomunicações (INATEL)	Brazil	Digital Broadcasting		
Universidad Nacional de la Plata (UNLP)	Argentina	Cybersecurity		
Arab region	Country	Priority Area		
Centre d'Etudes et de Recherche des Télécommunications (CERT)	Tunisia	Conformance and Interoperability		
Institut National des Postes et Télécommunications (INPT)	Morocco	Policy and Regulation		
National Telecommunication Institute (NTI)	Egypt	Spectrum Management		
Sudatel Telecommunications Academy-SUDACAD	Sudan	ICT Applications and Services		
Telecommunications Regulatory Authority (TRA)	Bahrain	Capacity Building in Internet Governance		
The Center of Information, Training, Documentation, and Studies in Communication Technologies (CIFODE'COM)	Tunisia	Broadband Access		
Asia-Pacific region	Country	Priority Area		
Advanced Level Telecoms Training Centre (ALTTC)	India	Broadband Access		

China Academy of Telecommunications Research (MIIT)	China	Conformance and Interoperability
National Information Society Agency (NIA)	Republic of Korea	Policy and Regulation
State Radio Monitoring Centre (SRMC)	China	Spectrum Management
The International Multilateral Partnership Against Cyber Threats (IMPACT)	Malaysia	Cybersecurity
TOT Academy – Ministry of Information and Communication Technology (MICT)	Thailand	Policy and Regulation; Broadband Access
CIS region	Country	Priority Area
Kyrgyz State Technical University (KSTU)	Kyrgyz Republic	Broadband Access; e-Waste
Moscow Technical University of Communications and Informatics (MTUCI)	Russian Federation	Cybersecurity; ICT Applications and Services
Odessa National Academy of Telecommunications (ONAT)	Ukraine	Policy and Regulation; Digital Broadcasting
CoEs Europe region	Country	Priority Area
Czech Technical University in Prague, Faculty of Electrical Engineering (CTU)	Czech Republic	Cybersecurity
Faculty of Electrical Engineering and Information Technologies, Ss. Cyril and Methodius University in Skopje (FEEIT)	The Former Yugoslav Republic of Macedonia	Broadband Access
Institute for Technology and Quality (ISQ)	Portugal	e-Waste; Conformance and Interoperability
National Institute of Telecommunications (NIT)	Poland	Capacity Building in Internet Governance
Technische Universitat Chemnitz (TUC)	Germany	Cybersecurity; Broadband Access