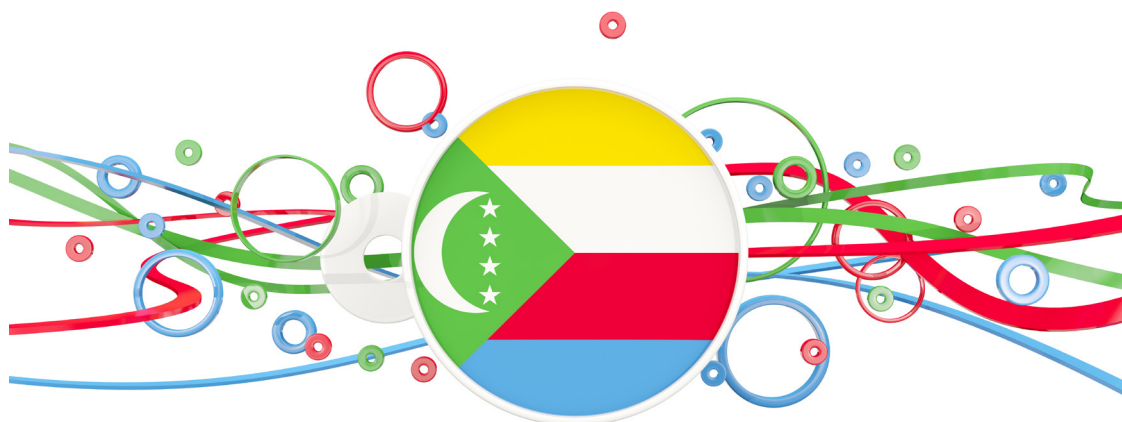


CONNECT A SCHOOL, CONNECT A COMMUNITY IN THE UNION OF COMOROS

January 2015 - December 2016

POST IMPLEMENTATION ASSESSMENT REPORT



CONNECT A SCHOOL, CONNECT A COMMUNITY IN THE UNION OF COMOROS

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Project Number..... 2COM15001

Project Manager Rouda Ali

Prepared by..... Mahmoud AL-WREIKAT

Date..... 16 December 2016

The International Telecommunication Union (ITU), in cooperation with the National Authority for the Regulation of ICTS (ANRTIC), Comoros, implemented a Project where computer equipment was installed in schools around the country, which were then connected to internet services.

This Project was designed to promote broadband connectivity in schools in remote, rural or underserved areas of Comoros, with the purpose to also serve as community ICT centers. The Project aimed to improve ICT access and use by school children and members of the local community. It also promoted equal access to ICTs for all, regardless of their ICT knowledge, including disadvantaged and vulnerable groups such as women, girls, indigenous and rural people, older persons and persons with disabilities.

This Project was able to connect schools to internet services, providing computer equipments to school children, as well as establishing in the connected schools, community ICT centres. Each centre is also being used for the socio-economic development of the community by providing fee-paying services to make the community ICT centers self-sustainable. Furthermore, this Project has also provided relevant training to the teachers and managers of the ICT centres, as well as trainers who are offering relevant training to community members, to enable them to use ICTs in their day-to-day social and economic activities.

PARTNERS



National Authority
for the Regulation of ICTS

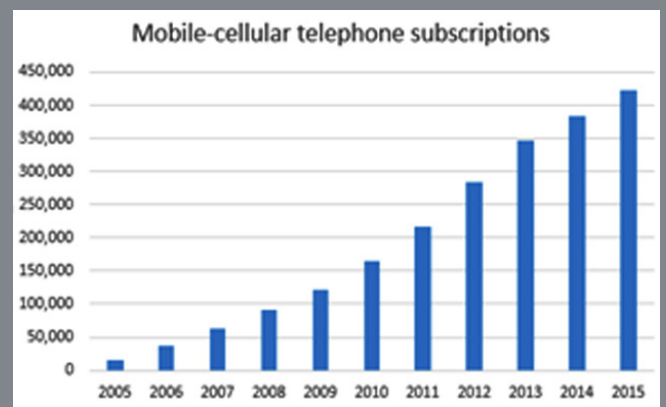
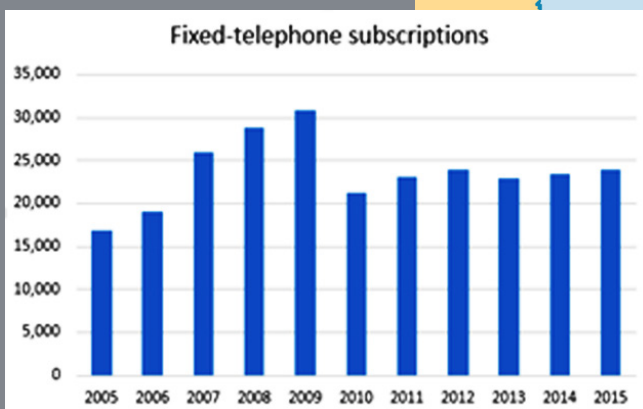
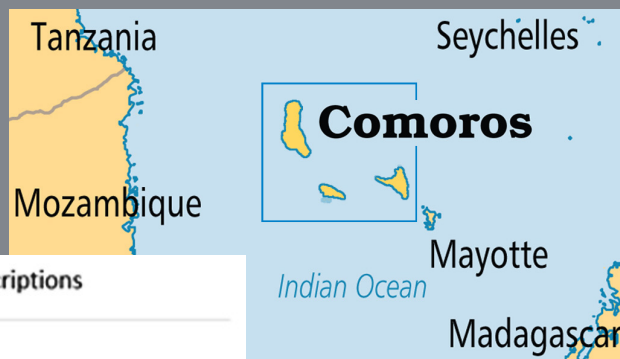


International
Telecommunication Union

1

BACKGROUND

There has been sufficient evidence that Information and Communication Technologies (ICTs) provide unprecedented opportunities to accelerate development. ICTs have proven to be a powerful driver of innovation, growth and productivity globally. Broad access to ICTs provides significant opportunities for improving government public services, health care, education, business development and the environment. They also open new channels for sharing of global knowledge resources and the free flow of ideas and opinions.



Although communities that lack access to and know-how of the use of ICTs risk marginalization, providing individual connectivity to rural and underserved areas as well as to disadvantaged and vulnerable groups is often too expensive for both the public or private sector. Smart policies promoting community access targeting these groups are essential. Existing school buildings can be used as community ICT centers. These centers can use ICTs to provide training and education for the improvement and social and economic development of marginalized groups. It is for this reason that the International Telecommunication Union (ITU) launched the “Connect a School, Connect a Community” in Comoros.

ROLE OF KEY STAKEHOLDERS:

MINISTER/ NATIONAL AUTHORITY FOR THE REGULATION OF ICTS (ANRTIC): facilitated the successful implementation of this Project.

MINISTER OF EDUCATION/ SCHOOLS: in charge of identifying the installation sites, as well as engaging the strong support from the local community in each site.

THE INTERNATIONAL TELECOMMUNICATIONS UNION (ITU): was responsible for the implementation of the Project with the key stakeholders in Comoros.

LOCAL COMMUNITIES: were the main providers of all facilities and furniture in each site, enabling the successful implementation of this Project.

2

SCOPE OF REVIEW

The scope of the implementation review mission for the Project 2COM15001 “Connect a School, Connect a Community in Comoros.” was to review the overall success of the Project and the level of achievement of its objectives, activities, expected results, use of the budget, timely execution of the work plan and equipment delivered (a list of the equipment is shown in Annex B, as per the Project document.)

Following the implementation of the Project, a post implementation review mission was carried out by the ITU, from 7-11 November 2016. Meetings were held at ANRTIC premises with Mr. Said Mouinou Ahamada, Director General of National Authority for the Regulation of ICTS (ANRTIC), senior staff and the different Project key stakeholders in Comoros as specified in Annex C.

After the visit to ANRTIC, the ANRTIC Director General accompanied ITU staff to meet with the Vice-President of Union of Comoros, H.E Mr. Abdallah Said Sarouma, who is also in charge of the Ministries of Transport, Post and Telecommunications, Information Technology and Communication.



During the post implementation review, meetings were held with policy makers, regulators, operators, education sector, the Consumer Protection Association, banks, aviation, users, students, teachers, trainees, mayors, local representatives and local communities, to discuss details related to the Project. (A list of some several persons met is included in Annex C).

The post implementation review of the Project included several sites' visits to schools. Visits were made to the established ICT centers in Vanaboini, Wella, Oichili and Mirontsi sites and meetings were held with representatives of the villages and the local communities as well as the Project key stakeholders. Detailed information is reflected in the following sections of this report.



3

RESULTS/ACHIEVEMENT

Schools in remote, rural or underserved areas of Comoros connected to broadband Internet services.



Key Performance Indicator

Number of schools located in remote areas, rural or underserved areas equipped and connected to the broadband Internet services.

Initial Target

10

Achieved

Yes

Remarks

The centers visited were equipped, but the main challenges appeared in electricity and internet connection and if it is available it is slow or continuously interrupted

ICT equipment, software, applications and services procured and installed in the selected school.



Key Performance Indicator

Identification of equipment suppliers, procurement and delivery of the equipment.

Initial Target

[10 months]

Achieved

Yes

Number of people trained (teachers and trainers).

20

Yes

Remarks

The list of equipment is shown in Annex B

Use and awareness of ICT services and applications enhanced.



Key Performance Indicator

Number of training programs delivered.

Initial Target

1 per school

Achieved

Yes

Remarks

Equipment was installed in the centers visited; training was offered to teachers and continued for students.

School teachers, managers and trainers of the community ICT centres trained.



Key Performance Indicator

Number of students benefiting from ICT equipment and related training.

Initial Target

500

Achieved

Yes

Number of people trained (teachers and trainers).

20

Yes

Remarks

Local communities and school students have access to the ICT equipment in the centers.

It is expected that more than 15,000

Recommendations for the sustainability of the connected



Key Performance Indicator

Number of teachers trained to use and education through ICT methods.

Initial Target

1 per school

Achieved

Yes

Remarks

In each center visited, 2 teachers were trained.

4

FINANCIAL STATUS

Project cash contributions ensured as planned?		
(Y/N/Not applicable)	Percentage (%)	Explanations
Yes	100%	Funds from the ITU

Is the level of expenditure at the expected level?		
(Y/N/Not applicable)	Percentage (%)	
Yes	100%	As of October 2016

Any funds remaining unused?		
(Y/N/Not applicable)	Percentage (%)	Explanations
No	0%	As of October 2016

5

FINDINGS

- The Project connected schools to internet services in remote, rural and underserved areas, through the installment of computer equipment in 10 selected centers around the country. This equipment included servers, desktop PC, UPS, multifunction machine-medium (Laser printer-scanner-photocopier-fax-digital sender), laptop, wireless routers, Projectors and Projectors screens.
- The main challenges have been the access to electricity, as well as the internet connection being slow or continuously interrupted.
- A list of the installed equipment can be found in Annex C.

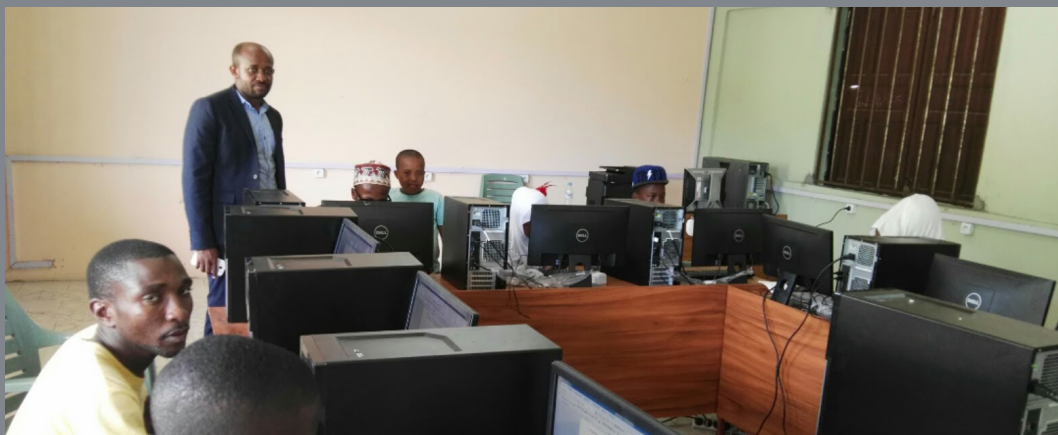


- The established community ICT centers are being used to support socio-economic development activities of community members and to provide fee-paying services to ensure the centers' self-sustainability.
- Local communities provided all the furniture for the centers including, but not limited to: desks, chairs, carpets, rooms' painting etc. In addition, some communities provided computers, batteries, solar energy and ensured the security and maintenance of all the installed equipment.



Some local communities provided computers, batteries and solar energy

- The Project provided crucial training to three different groups, based on the local needs of the communities, to help ensure the Project's long-term sustainability and improve the quality of life for the community members. The persons trained included the following:
 - Teachers (teaching children how to use computing devices and applications).
 - ICT center managers (basic ICT literacy).
 - Trainers who will provide training to the rest of the community members.





- Each community ICT center is supporting the ongoing economic and social activities of the local community members.
- The visits to the different sites and the meetings with all key stakeholders ensured a common vision and understanding of the important roles of all stakeholders, as well as created awareness among senior government officials, local communities and other national stakeholders to sustain this Project on a long term basis.
- A strong national political commitment to support and promote the Project among national media, local communities and stakeholders has been key for the Project's success.
- There is a strong political will in Comoros to promote gender equality and empower women and girls through ICTs. They also consider important that women participate and engage effectively in the political, economic and public life of Comoros, as well as ensure equal access for all girls, boys, women and men to affordable and quality education. The use of ICTs are key.



- Training sessions were conducted to introduce ICT applications to students and local communities' members, who had limited knowledge of information and communication technologies. These sessions were very helpful as they assisted students and local communities to better understand how they can use ICT applications in their own lives.

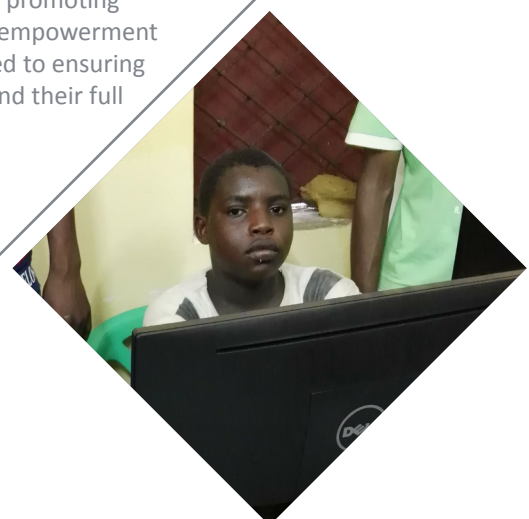
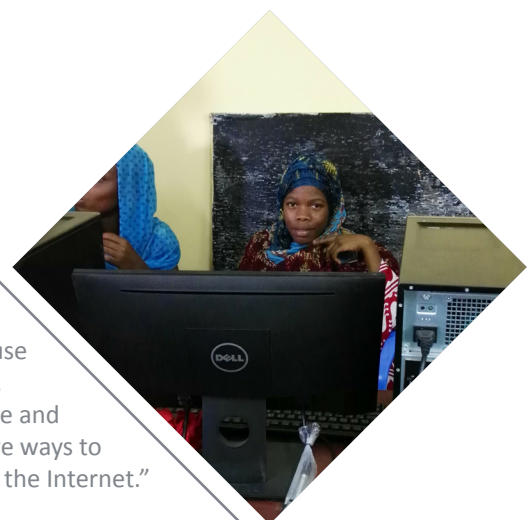
“This Project improves ICT access and use by school children and members of the local community, including disadvantaged and vulnerable groups such as women and girls, older persons and persons with disabilities and low-income citizens in our towns and villages.”

Mr. Said Mouinou Ahamada-
Director General

“We want rural families and communities to use ICTs to improve their economic and social life. Comoros has an attractive and stunning nature and landscapes, ICT explores and suggests effective ways to develop tourism and related services through the Internet.”

“We know and we endorse the importance of promoting and maintaining gender equality and women empowerment in all levels of development. We are committed to ensuring that the ICT enables women empowerment and their full participation in the use of ICTs.”

H.E Abdallah Said Sarouma, Vice – President



Mr. Maoulida Ben Ousseine
Commissioner a de l'éducation de l'île
autonome de Ngazidza

"These centers
will play a key role
in the development
of ICT knowledge for
all boys, girls, women and
men in rural and remote areas
of the Union of Comoros."



:"It is not only the first time I see computer in the
center, but now I can use it, thank you all."
- a student

"Thank you for showing me the world, with your center, I
can type and practice and communicate with others easily."
- a student

"I will work hard to make money, to buy my own computer;
yes my family wants me to learn and study to help them,
thank you ITU."- a student



Mr. Hamidou Mhoma
President- ACTIC

"We will support
our students in
developing ICTs
applications to explore and
presenting Comoros natural
resources, cultural heritage, and
tourist services as well as setting
up online ICTs applications."

- The ICT training also provided instruction and guidance on new ways to disseminate information, as well as access information related to markets, agriculture and livestock forums.
- Teachers in Comoros need to be equipped with the necessary digital skills in order to empower them to take advantage and share with their communities the opportunities offered by the global economy.





- The operators Comoros Telecom, Telma and Comoros Cable showed high interest to further provide connectivity to support the ICT centers and their local communities.
- After discussions with ITU, stakeholders acknowledged that competition is the only way for Comoros to develop quality, reliable, sustainable and resilient ICT related infrastructure, including access to internet, which will support economic development and human well-being of all people in Comoros. Furthermore, competition will bring the latest ICT technologies, new and better services, more coverage, increased government revenues, affordable and equitable access of ICTs for all people in Comoros.

“This Project improves ICT access and use by school children and members of the local community, including disadvantaged and vulnerable groups such as women and girls, older persons and persons with disabilities and low-income citizens in our towns and villages.”

Mr. Said Mouinou Ahamada-
Director General



6 LESSONS LEARNED.

- To support and help each other is part of the culture and daily lives of the Comoros local communities. These elements played an important role in the successful implementation of this Project.
- Projects that are oriented to connect schools and local communities to internet services, play a key role in the dissemination of ICT knowledge into the rural and remote areas of the country.
- These types of projects bring technology into the classroom and allows teachers to use ICTs in their teaching methods, as well as provide students with life skills such as critical thinking, problem solving and collaboration abilities.
- By partnering with local communities, the Project was able to achieve greater results. All projects should ensure an active involvement of the different key stakeholders, a strong political commitment from the local government, as well as the participation of local champions.

7 CONCLUSIONS

- This Project was able to build ICT related capacity of teachers, which consequently also impacted students' performance. Local communities were able to harness the power of ICTs to improve their quality of life.

- The Project assisted the Government of Comoros to improve ICT access in several schools, especially for school children and members of the local communities, including persons that are part of disadvantaged and vulnerable groups in remote, rural or underserved areas.
- The Project also contributed to raise awareness on the importance of connectivity in schools and the need to properly connect them.
- The training on ICT, which was organized within the Project, was also attended by the Project stakeholders.
- The Project significantly improved access to ICTs in schools and increased the use of ICTs by students and members of the local communities in the Comoros. Furthermore, the Project promoted the importance of having a technological environment in rural areas, which allows everyone to take full advantage of the opportunities offered by ICTS.
- The Project, in all its sites, received strong support from the local communities as it was considered important for the children’s education and the future of the country.

“My Center in my school, received support from the local community, is and will be community-oriented - and beneficial to all the community including framers and fishermen. I want my center to be a model center for others”

Mr. Anlamoudine Oumour,
School Director-
Vanaboini

Mr. Nourdine Mohamed
Headmaster of the center-
Ouellah

“The Project brought technology into the classroom and allowed teachers to teach their students critical thinking, problem solving and collaboration skills”

Mr. Mohamed Omar
-Director of Mirantsi
Center

“Helping others is in the culture of the daily lives of the Comoros”



- Comoros needs further ICT related support in capacity building, climate change, ICT applications, regulatory and market environments, spectrum management, digital broadcasting and technology and network development.

“We know that the ITU knows what Comoros needs, but as a respect, our culture and duties require us to ask the ITU for support”

- The commitments and the determination of the local communities helped to make this Project a success story.

8 RECOMMENDATIONS

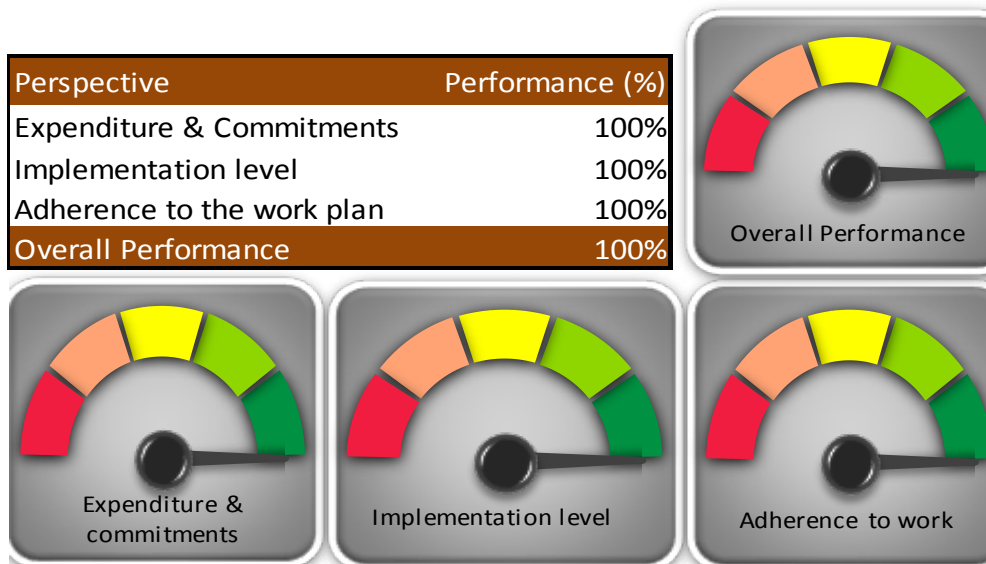
- ANRTIC, Comoros Telecom, Telma and Comoros Cable are invited to coordinate and work more closely to ensure high quality internet connectivity for the schools, so that the community ICT centers can provide sustainable services to the local communities.
- The Vanaboini and Mirontsi sites are very well set up and equipped, so they can be used as a training centers for teachers and trainers in Comoros.
- It is recommended that teachers in Comoros receive more intensive ICT related training to improve their digital literacy skills.
- The local communities in rural areas could receive ICT related training on planting and harvesting crops, fishing and breeding animals, better access to markets and to explain how farmers can obtain online information on valuable resources to improve their life.
- Comoros needs further support in ICT related capacity building, climate change, ICT applications, cybersecurity and child online protection, regulatory and market environments, spectrum management and digital broadcasting and technology and network development.

9

ANNEX A: PROJECT TABLE SUMMARY & PROJECT METRICS

Project Number	2COM15001	Project Budget	CHF150,000
Project Title	Connect a School, Connect a community in the Comoros		
Brief Description	This Project “Connect a School, connect a community in the Comoros” was designed to promote broadband connectivity in schools in remote, rural or underserved areas of Comoros. This Project aims to improve ICT access and use by schoolchildren. Furthermore, this Project will also provide relevant training for teachers, managers of the ICT centers and the trainers who will provide socio-economic relevant training for community members to enable use of ICTs in their day-to- day social and economic activities.		
Partners	National Authority for the Regulation of ICTS (ANRTIC)		
Prepared by	Mahmoud Al-Wreikat	Date	17 November 2016

Summary – Project Metrics



PROJECT BACKGROUND

The goals of the World Summit on the Information Society (“WSIS”), which are aligned with the United Nations Millennium Development Goals (“MDGs”), can be achieved in regions through school connectivity. For meeting the WSIS targets of connecting all villages, towns and cities, as well as the MDGs. “Connect A School”, an initiative undertaken by the International Telecommunication Union (“ITU”), is a global multi-stakeholder partnership aimed at mobilizing human, financial and technical resources required to bridge major gaps in information and communication technology (“ICT”) infrastructure across the regions. In this context, the ITU have developed and signed Project to support school connectivity and ICT applications development in Comoros.

BRIEF DESCRIPTION:

This Project was designed to promote broadband connectivity in schools in remote, rural or underserved areas of Comoros. This Project aimed to improve ICT access and use by schoolchildren.

Furthermore, this Project also provided relevant training for teachers, managers of the ICT centres and the trainers who will provide socio-economic relevant training for community members to enable use of ICTs in their day-to- day social and economic activities.

THE PROJECT EXPECTED RESULTS

- Ten (10) schools in remote, rural or underserved areas of Comoros connected to broadband Internet services.
- ICT equipment, software, applications and services procured and installed in the selected school.
- Use and awareness of ICT services and applications enhanced.
- School teachers, managers and trainers trained
- Recommendations for the sustainability of the connected schools and community centres.

ANNEX B: RECEIPT OF EQUIPMENT BY ANRTC

No	DESCRIPTION	QUANTITY
1	Desktop PC	100
2	UPS + Installation	10
3	Multifunction Machine-medium range (Laser Printer-Scanner-Photocopier-fax-Digital sender)	10
4	Server	10
5	Medium Range Laptop	10
6	Wireless 4 Port Router	10
7	Projectors	10
8	Projectors Screens	10

LIST OF PERSONS MET

UNION OF THE COMOROS

- Vice – President H.E Abdallah Said Sarouma, Vice-president and in charge Minister of Transport, Postes, Telecommunication, Information Technology and Communication.
- Nourdine Mdahoma- Counselor, Minister of Foreign Affairs

NATIONAL AUTHORITY FOR THE REGULATION OF ICTS (ANRTIC):

- Said Mouinou, Director General
- Mohammed Ibrahim, Counselor for International Affairs
- Assaf Mohamed Sahali, Communication Counselor to the Director General
- Djinti Ahamada, Head of Legal Affair Department
- Asmina Said Ahmed, Head of the Project Management Department.
- Yussouf Soule, Head of the Administration and HR Department
- Taoufiki Mbae Hamadi Technical, Director
- Kaissoine Abdou, Head of Engineering Department
- Ali Ahamada, ANRTIC Translator

EDUCATION SECTOR:

- Maoulida Ben Ousseine, Commissioner a de l'éducation de l'île autonome de Ngazidza
- Zaitoune Mounir, Inspector general for education, former commissioner
- Shaban Ramadan, Counselor to the Minister of Education and higher Education

SCHOOLS:

- Principals in Vanaboini, Oichili, Wella and Mirontsi Center
- Anlamoudine Oumour, Director School "Vanaboini"
- Mohamed Omar, Director of Mirontsi School
- Mari Mohamed Professeurs, Director of the Center Oichili
- Nourdine Mohamed, Head Master of the School- Ouellah
- Ibrahim Said, Professour Mirontsi School

LOCAL COMMUNITIES

- Ali ComAbo Abdallah, Maire, Mirontsi
- Abdourahmane Adinane
- Abdallah Abdou
- Ali combo Abdallah
- Soidrizidine Abdallah
- Toilouine Mohamed Said
- Abdallah Abdoue, Maire Semia
- Salim BOURHANE, Maire Oichili Yadjou
- Mariame Ahmed Ben Alladadui, Adjointe Maire
- Adamdjy Ramadhoine, Secretaire General Maire
- Ridjalli Oumar, Adjointe Maire
- Elfazul Abdallal, Adjointe Maire

ANJOUAN:

- Ali ComAbo Abdallah – Maire- Mirontsi
- General Manager- Comoros Telecom Anjouan
- IT Manager- Comoros Telecom Anjouan

TELMA:

- Alain Brillard, Director General
- Karim Attoumani Mohamed, PMO & Regulatory Project Manager
- Fatima Said Bacar, Assistance de Direction et Relations Publiques

COMOROS CABLE:

- Ali Karani, Director General

PRIVATE SECTOR:

- Banking sector: Ismail Mahadi
- Aviation sector: Raphael Otwoma, Kenya Airline
- Aviation sector: Maktoub Ahmed, Inter ILE AIR
- Aviation sector: Inter ILE AIR, Director General
- Fishing sector: Allaoui Toihirdine, Director General, Centre Mersat

ASSOCIATION DES CONSOMMATEURS DES TIC (ACTIC)

- Hamidou Mhoma, President- ACTIC
- Naguib Mhamadi, ACTIC

UN

- Koffi Segnigbeto, UNSECO- Comoros education strategy
- Rouda Ali, Programme Officer ITU Regional Office for the Arab States
- Nebghouha mint Mohamed, Consultant UNSECO- Comoros education strategy

ITU Projects

ITU Headquarters, Geneva, Switzerland

Email: Bdtpjrhq@itu.int

Tel: +41 22 730 6090

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