



# **Project Summary**

Project Title:	Information Security Capacity Building Programme 2016
	(INT16K12)
Implementing Institution:	CIFAL Shanghai International Training Center
Date:	2018-4-28

# 1. Introduction

The project of Information Security Capacity Building Programme 2016 has come to a successful conclusion. It is endorsed by **PEREZ-GUERRERO TRUST FUND** of UNDP and submitted by CIFAL Shanghai.

CIFAL Shanghai (Centre International de Formation des Autorités Locales – International Training Centre for Local Authorities) is a cooperation institute between Shanghai municipal government and United Nations Institute for Training and Research(UNITAR). It is a hub for capacity building and knowledge sharing between local authorities, national governments, international organizations, the private sector and the academics, mainly of the developing countries. CIFAL Shanghai embrace a high reputation for bringing together individuals from developing countries for years to renew their knowledge and professional skills of Information Technology in the informatization and industrialization era. Up to now, accomplishments achieved by CIFAL Shanghai are well-demonstrated by1229 beneficiaries from 117 countries abroad.

# 2. Background

In the 21st century, with the rapid development of information construction and IT technology, the application of various network technologies has become more extensive and in-depth. At the same time, many network security problems have emerged, which has made the importance of network security technologies more prominent. Network security has become a concern of all countries. The focus not only relates to the information resources and asset risks of institutions and individual users, but also relates to national security and social stability. It has become a new area of hot research and talent demand. Network security has become one of the hot topics in the world and has attracted widespread attention from the society. Network security is a systematic project and has become the primary task of information construction and application. Network security technology involves laws, regulations, policies, strategies, norms, standards, mechanisms, measures, management, and technology. It is an important guarantee for network security. Information, material, and energy have become the three pillars and important guarantees for the survival and development of human society. The rapid development of information technology has brought profound changes to human society. With the rapid development of computer network technology, countries in the world have made remarkable achievements in network construction. The widespread application of electronic banking, e-commerce and e-government has enabled computer networks to penetrate into the country's politics, economy, culture, and culture. The various fields of national defense construction are spread across every aspect





of the work and life of modern information society. The integration of "digital economy" and global electronic trading is taking shape. With a wide range of information and network technologies

China is a largest developing country. After more than 30 years of rapid economic development, information security technology has been widely used in many fields. It has gained a great deal of experience and successful cases. We are willing to share these experiences and successful cases with developing countries to help in development. National economic development and social progress.

With decades of expertise in providing ICT training and international forums, CIFAL Shanghai is a hub for capacity building and knowledge sharing in ICT industry with local authorities, national governments, international organizations, private sectors and the academics. CIFAL Shanghai carried out the program of Information Security Capacity Building Programme by organizing workshop and site visit to enhance the capabilities in the field of Information Security for the participants from the developing countries.

# 3. Preparation

In preparation periods of implementing the project of Information Security Capacity Building Programme, CIFAL Shanghai carried out the following tasks:

- ♦ Building a project team
- ♦ Designing training courses
- ♦ Identifying lecturer
- ♦ Contacting the companies of site visit
- ♦ Arranging accommodation for participants

# 4. Working Team

- ♦ Mr. WANG Genxiang: Director
- ♦ Mr. WU Yugang: Deputy Director
- ♦ Ms. WANG Kemin: Deputy Director
- ♦ Dr. Qiao Yuanqing: Trainer
- ♦ Ms. Wang Jie: Project Coordinator

# 5. Project Achievements

A total of 4 training courses were held. 131 trainees from 33 developing countries participated in training on information security and visited enterprises and software parks in Shanghai and surrounding areas. These developing countries are: Cuba, Belarus, Bosnia and Herzegovina, Kazakhstan, Malawi, Saudi Arabia, South Africa, Suriname, Antigua and Barbuda, Trinidad and Tobago, Vanuatu, Grenada, East Timor, Indonesia, Palestine, Pakistan, Micronesia, Guyana, Moldova, Colombia, Panama, Egypt, Lesotho, Ghana, Zimbabwe, Sierra Leone, Sudan, Uganda, Zambia, Botswana, Ethiopia, Seychelles,





Cambodia.

# 6. Concrete Performances

- ♦ Case Study
- ♦ Training Course
- ♦ On-Site Visit
- ♦ City Tour

# 7. Methodology

UNITAR (United Nations Institute for Training and Research) CityShare Methodology has been applied in project activities:

UNITAR CityShare Methodology was used across the group events. Participants from different countries be encouraged to propose their virtual project topics and organize topic groups to simulate a project planning process. In the group planning, CityShare Methodology is used for self-assessments and cross assessments.

# 8. Training Course

4 training courses included on-site visits were conducted in the periods of 2016-2017:

#### **Training Course I**

Theme:	Information Security and Mobile Internet
Date:	June 6-7, 2016
Venue:	Meeting Room, 5th Floor, Shanghai Academy of Social Sciences
On-site Visit:	Hangzhou Hikvision Digital Technology Co., Ltd.
Participant Number:	63

On June 6, 2016, 63 participants participated Training courses on information security and mobile internet. The participants came from 24 countries in Asia, Europe, Africa, Latin America, and the South Pacific region. The countries were Antigua and Barbuda, Trinidad and Tobago, Vanuatu, Grenada, East Timor, Indonesia, Palestine, Pakistan, Micronesia, Guyana, Moldova, Colombia, Panama, Egypt, Lesotho, Ghana, Zimbabwe, Sierra Leone, Sudan, Uganda, Zambia, Botswana, Ethiopia, Seychelles.

The training course invited Mr. Gu Yuan, a CNC engineer of Shanghai Yinji Group, to give a lecture on the topic of "Data Vulnerability Prevention Technology".

The so-called "one hundred and one secret", even the precise programming or strict data monitoring may have operational risks. In order to ensure that the information is "failsafe", the defense technology





of data loopholes is the expertise that IT professionals are eager to seek.



In the lecture, Gu Yuan first explained to the trainees the concept of data loophole defense, and by using of animated short films to lead the participants to think about the problems, and then combined the internal and external causes to describe the technical hidden dangers in the actual operation, so that participants can establish defense data loopholes. Risk awareness. Afterwards, Mr. Gu focused on how to construct the thought step of a data vulnerability defense solution that is suitable for the enterprise itself. First of all, companies need to understand the actual situation of their IT architecture and information assets and choose the type of data leakage prevention solution. For example, the internal networks of many security companies are isolated from the Internet. Host-based data defense solutions should be selected. After that, the company can manage its internal business management to technical support according to its own security needs and actual conditions. At the same time, it considers the accuracy of the actual operation of the program, the availability of features, the convenience of management, and the economics of cost. The company's unique data vulnerability defense program ultimately achieves the goal of protecting corporate information assets and truly realizes corporate information.







CIFAL Shanghai invited Mr. Liu Wen, CEO of Hong Kong Xiupu Holdings Co., Ltd., to give lecture to participants on the theme of the planning and implementation of the mobile Internet and wireless networks. Mr. Liu introduced the history of mobile internet, the development, construction of modern mobile communications, three major advantages, and the impact on people's lives. He also discussed the future development of mobile internet and students. Mr. Liu Wen also briefed the participants on iBar's related profiles. At the same time, he discussed the details of modern mobile Internet applications. Mr. Liu answered the questions one by one wihle the participants raised their own questions one after another.



#### **On-Site Visit in training course I**

On June 7, CIFAL Shanghai organized the participants in training course to visit Hangzhou Hikvision Digital Technology Co., Ltd.

Hikvision is a leading provider of security products and industry solutions, providing leading security products and professional industry solutions worldwide.

Hikvision's products include security products such as cameras/smart domes, optical transceivers, DVR/DVS/cards, network storage, video synthesis platforms, and central management software, and are targeted at finance, public security, telecommunications, transportation, justice, education, Power, water conservancy, military and many other industries provide suitable subdivision products and professional industry solutions. These products and programs are widely used in more than 100 countries and regions around the world and in major security projects such as the Beijing Olympics, the Universidad, the Asian Games, the Shanghai World Expo, the 60th National Day parade, and the Qinghai-Tibet Railway.

At first, the trainees came to Hikvision's product showroom. There, the participants mainly visited their intelligent photography surveillance systems and road monitoring systems and learned that Hikvision has gained widespread recognition both inside and outside the industry. It has been recognized by various awards for many years, and participants from Sierra Leone asked about the technical issues of





photography surveillance and network security monitoring, especially in the military and defense applications, the staff introduced the technical characteristics of various security products and security solutions.





#### **Training Course II**

Theme:	Big Data Cloud Computing and Information Security
Date:	August 15-16, 2016
Venue:	Meeting Room, 5th Floor, Shanghai Academy of Social Sciences
Site Visit:	Shanghai Supercomputing Center
Participant Number:	29

On August 15, 2016, 29 participants from 13 developing countries in Asia, Africa, Latin America, the Caribbean and Europe took part in the training course. They were Pakistan, Antigua and Barbuda, and Cuba. Panama, Belarus, Botswana, Bosnia and Herzegovina, Ghana, Kazakhstan, Malawi, Saudi Arabia, South Africa, Suriname. The theme of the training course is Big Data Cloud Computing and Information Security.







CIFAL Shanghai invited Mr. Gao Jun, CEO of Shanghai InforStack Information Technology Co., Ltd. to give a lecture. InforStack was founded in January 2013 as the only IDBS agent in China, focusing on the life sciences field. Data management and data analysis solutions are dedicated to the development of world-leading commercial software in the field of high-performance computing and large-scale data mining. In the topic of big data and cloud computing. Mr. Gao Jun introduced the background of data analysis to the students and showed the students the structure, functions, and usefulness of the BDOSS system. Finally, the function of the BDOSS system was demonstrated in detail. The participants expressed their confidence in the interest and future development of the BDOSS system.

CIFAL Shanghai invited Mr. Gu Yuan, a CNC engineer of Yinji Group, to give a lecture on "Data Vulnerability Prevention Technology". In the lecture, at first Mr. Gu Yuan explained the concept of data loophole defense to trainees and led the participants to think through questions by playing animated short films. Combined with internal and external causes, the technical hidden dangers in practical operation are briefly described, so that students can establish a risk awareness of defense data loopholes. Afterwards, Mr. Gu focused on how to construct the thought step of a data vulnerability defense solution that is suitable for the enterprise itself. At first, companies need to understand the actual situation of their IT architecture and information assets and choose the type of data leakage prevention solution. For example, the internal networks of many security companies are isolated from the Internet. Host-based data defense solutions should be selected. After that, the company can manage its internal business management to technical support according to its own security needs and actual conditions. At the same time, it considers the accuracy of the actual operation of the program, the availability of functions, the convenience of management, and the economics of cost. The company's unique data vulnerability defense scheme ultimately achieves the goal of protecting enterprise information assets and truly realizes information security of the enterprise.



Mr. Gao Jun



Mr. Gu Yuan,

#### **On-site visit in Training course II**

On the afternoon of August 16, the participants visited the Shanghai Supercomputing Center. It is the first high-performance computing public service platform that is open to the society, resources sharing,





first-rate facilities and complete functions in China. It has a Dawn 4000A (tenth in the world in 2004) and a "magic square" (Dawn 5000A, ranking the world in 2008 Ten, Asia First) and other three supercomputers, equipped with abundant scientific and engineering calculation software, are committed to providing high-end computing services for national scientific and technological progress and corporate innovation. Here, the participants visited the important information infrastructure invested and constructed by the Shanghai Municipal Government. The "Magic Cube" Dawn 5000A with a speed of 200 trillion times per second attracted the participants' curiosity. Dawn 5000A was ranked 10th in the top global high-performance computer TOP500 list. the Shanghai Supercomputing Center has become one of the world's most powerful high-performance computing centers.





#### **Training Course III**

Theme:	E-commerce and Information Security
Date:	April 24-25, 2017
Venue:	Meeting Room, 5th Floor, Shanghai Academy of Social Sciences
On-site Visit:	Shanghai Guan'an Information Technology Co., Ltd.
Participant Number:	20







On April 24, 2017, 20 participants from Cambodia participated the training course on e-commerce and information security. The training courses include lecture and on-site visit.

CIFAL Shanghai invited Mr. Zhang Weigang, the technical director of Shanghai Guan'an Information Technology Co., Ltd., and Mr. Wang Wenjun, the project manager, to give lectures in the training course. Mr. Zhang Weigang, on the theme of e-commerce and information security, systematically introduced the threats and challenges faced by e-commerce information systems in today's information-developed era. At the same time, he introduced participants to the measures and solutions taken and their derivatives. Information security management system. the project manager Mr. Wang Wenjun, on the challenge of e-commerce information security, introduced detailly the threats, requirements, and technical levels of e-commerce information security. Starting from one example, the participants were able to have a more comprehensive understanding on the e-commerce information system.





CIFAL Shanghai invited Professor Li Yi of Shanghai Jianqiao College to have a lecture on the development and current achievements of e-commerce,

The subject of Professor Li Yi's lecture is the past and present of e-commerce, the lecture has started from the trade of ancient China and now the rise and prosperity of e-commerce in China. It can not only allow participants to systematically understand the history of the changes in China's trade, but also allow the participants know the environment and conditions for the rise of e-commerce in China. In the lecture, Ms. Li also carefully introduced all aspects of e-commerce and the elements of the e-commerce network. The rapid development of Alibaba and the completion of its own industry chain made the participants sigh. Professor Li did not only use it. Preparing adequate lecture notes for students to answer questions and answers, but also to use a paragraph of small video to enable participants to have a more intuitive grasp of knowledge points.









#### **On-site Visit in Training Course III**

On April 25th, for deepening the understanding of information security knowledge, the participants of the training course visited the Shanghai Guan'an Information Technology Co., Ltd.

Shanghai Guan'an Information Technology Co., Ltd. is a company that focuses on data and big data. Its business covers big data security, big data risk control, big data car networking, big data industry application, which is the high end of China's vast industry Users provide information data security overall solutions with international standards (such as ISO27001, PCI-DSS, SOX404, national level protection, etc.) and various big data security products and security big data technology services. The main members of Guan'an Information consist of members of the famous anti-dark team in China, senior security personnel of internationally renowned security companies, and big data security experts. In the financial, operator, power, ISP/ICP, manufacturing, government departments and other industries already have a wide range of high-quality customers, and in the industry enjoyed a good reputation and reputation.

With the continuous development of the company's business, in addition to the Shanghai headquarters, the Beijing R&D Center, the Shanghai Innovation Research Center, and the Shanghai Platform Application Center were established to ensure the leading position of the core technology. Established a strategic layout covering the whole country and has set up several offices and branches in Guangzhou, Nanjing, Wuhan, Guiyang, Changsha, Zhengzhou, Hangzhou, Hohhot and Taiyuan in advance to further improve the company's operating influence and improve customer satisfaction. degree. The introduction by Mr. Zhang Weigang to the rapid development of the company, its excellence and glory, and the current situation of the company's operations in the past year have aroused great interest among the participants. They also visited the Shanghai R&D Department, Innovation Research Department, Project Department, and Products. Departments and other departments, in the on-site visit, the company's responsibilities and results of various departments were recognized and praised by the participants.









#### **Training Course IV**

Theme:	E-government and Information Security
Date:	July 13-14, 2017
Venue:	Meeting Room, 5th Floor, Shanghai Academy of Social Sciences
On-site Visit:	Huawei Group
Participant Number:	19



On July 13, 2017, 19 participants from Guyana took part in the training course on e-government and information security. The training courses include lecture and on-site visit.

CIFAL Shanghai invited Mr. Zhang Weigang, the technical director of Shanghai Guan'an Information Technology Co., Ltd., to have a lecture on e-government and information security to participants. Mr. Zhang systematically introduced the threats and challenges faced by the e-government system in today's information-developed era and shared the participants' measures and solutions, the resulting information and security management system. In the lecture, Mr. Zhang illustrated in detail the threats, needs, and technical levels of e-government information security. Starting with examples, the participants have a more comprehensive understanding of e-government and information security.







CIFAL Shanghai invited Ms. HUANG Jingwen, the deputy director of the Institute of China Shipbuilding to have a lecture to participants with a better understanding of the e-government's booming development in China. Ms. Huang introduce participants to e-government by using case studies. The rapid development in China in recent years has driven several domestic companies and governments to explore a broader market, among which are familiar companies and Platforms such as the United Nations, and Mr. Huang also introduced the more popular e-government platform in China for participants, enabling participants to learn theoretical knowledge and know how to apply the theory into practice.



#### **On-site Visit in training Course IV**

On July 14th, CIFAL Shanghai organized the participants to visit go Huawei Group, a world's leading provider company in information and communications solutions, for the purpose of providing participant with in-depth understanding of e-government and information and communication solutions. The Huawei Group continues to innovate around the needs of its customers and opens up cooperation with partners to build end-to-end solution advantages in areas such as telecommunications networks, enterprise networks, consumers, and cloud computing. Huawei Group is committed to providing competitive ICT solutions and services to telecom operators, enterprises and consumers, continuously improving the customer experience and creating maximum value for customers. At present, Huawei's products and solutions have been applied in more than 140 countries and serve 1/3 of the world's population.

Through the visit, the participants learned about the company's business philosophy: Huawei's vision is to enrich people's communication and life, use professional experience in the field of information and communication, eliminate the digital divide, and allow everyone to enjoy broadband. In addition, in response to the global climate change challenge, Huawei has helped customers and other industries reduce energy consumption and carbon dioxide emissions through leading green solutions to create the best social, economic and environmental benefits. Afterwards, the company specially arranged training sessions for participants in the seminars to facilitate the concentration of the needs of the participants. Through communication and negotiation, they can meet the cooperation needs of the participants to the





greatest extent and help more developing countries improve and perfect informatization.





# 9. Conclusion

During the period between 2016 and 2017, CIFAL Shanghai carried out the project of Information Security Capacity Building Programme, cultivating for developing countries skilled professionals needed to make governments and firms more efficient, helping to create jobs and livelihood in the developing countries especially to the youth who long for life skills and vocational training to access to decent jobs as information security is a stable and growing profession, to enhance the local people of these countries the capability of speeding economic growth and social development.

#### 10. Annex

- ♦ Participant list
- ♦ Financial report

CIFAL Shanghai International Training Center