## INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Budapest, Hungary 11-13 January 2016

Contribution of the Republic of Cameroon to the CSTD 2015-16 priority theme on 'Smart Cities and Infrastructure'

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# **CAMEROON'S PARTICIPATION TO CSTD WORKS**

## I. SMART CITY

SMART CITY is based on two infrastructure (physical infrastructure and digital infrastructure) and services grouped under six axes (smart mobility, smart economy, smart living, smart governance, smart people and smart environment). The situation in Cameroon shall follow this classification.

#### **INFRASTRUCTURE**

As regards physical infrastructure, Cameroon has not recently gone into tangible actions in view to make its infrastructure (water, energy, transport, etc) comply with smart city requirements. However, some projects were thought in that light, notwithstanding the overall vision of smart city, namely:

- the construction (in a distant future) of a modern tramway network with the help of the Korean cooperation (an agreement has already been signed);
- the acquisition of SCADA systems by ENEO, in view to optimize the electricity distribution network;
- the use of solar panels to power street lights and surveillance cameras in Yaounde and Douala;
- the automatic installation of fiber optic cables during the construction of new roads (there might be a World Bank imposed regulatory requirement, that all civil engineering service providers allow locations for the installation of fiber optic cables on newly constructed roads);
- the initiation by ARSEL of reflections on the development of smartgrid in Cameroon.

In terms of telecommunications infrastructure, substantial efforts have been made by the Cameroonian government, especially through:

- the construction of a fiber optic backbone interconnecting the different regions of the country;
- the construction of several landing points connected to submarine cables SAT3, ACE, WACS, MAINONE, etc;
- the construction of urban optical loops in Yaounde and Douala, that could serve as data transmission support from applications and potential sensors essential to the SMART CITY;
- the granting of international licenses to telephone operators, that helped them set up 3G networks;
- the forthcoming construction of two IXPs in Douala and Yaounde;

#### **SERVICES**

As concerns Smart City services, some initiatives are reported:

- the establishment of a surveillance camera network in Yaounde and Douala will be expanded to other regions;
- the development of a telemedicine platform with the help of Indian cooperation;
- the development of phone based money transfer (mobile money);
- the forthcoming establishment of an emergency telecommunications network to help develop other services, including the intensification of the surveillance cameras network, the geolocation of emergency calls, etc.;
- the development of E-learning through MOOCS offered by several university institutions.

It is worth noting that the E-government project (which would be at the strategy validation phase) will help develop additional services aiming to improve interactions between citizens and governments (G2C), and also between the government and businesses (G2B). However, the current vision of the E-Government has not sufficiently considered the disclosed decentralization of the government, which adapts best to the concept of SmartCity.

Moreover, in a view to develop smart city services, ANTIC initiated a competition on innovation, which aimed to foster the spirit of innovation among youths, to help them develop ICT based solutions to problems of the Cameroonian society. More than a hundred youths took part in the competition and presented several innovative projects, including a pharmacy geolocation platform, an E-commerce platform, an online patients monitoring application, etc.

# **II. DEVELOPMENT OF THE DIGITAL TECHNOLOGY**

### **INFRASTRUCTURE**

- The construction of a fiber optic backbone of more than 6,000 km interconnecting the different regions of the country. Cameroon's ambition is to move to more than 20,000 km by 2020;
- the construction of several landing points connected to submarine cables SAT3, ACE, WACS, MAINONE, etc;
- the construction of urban optical loops in Yaounde and Douala, that could serve as data transmission support from applications and potential sensors essential to the SMART CITY;
- the granting of international licenses to telephone operators, that helped them set up 3G networks;
- the construction of two Internet Exchange Points (IXP) in Yaounde and Douala;
- the migration to DTT (Digital Terrestrial Television) which will aim to provide savings on certain frequency bands to be used for the development of the broadband;

- The forthcoming construction of an ICT Technopole / free zone to promote the development of startups in our country;

### **SERVICES**

- the establishment of a surveillance camera network in Yaounde and Douala will be expanded to other regions;
- the development of a telemedicine platform with the help of Indian cooperation;
- the development of phone based money transfer (mobile money);
- the forthcoming establishment of an emergency telecommunications network to help develop other services, including the intensification of the surveillance cameras network, the geolocation of emergency calls, etc.;
- the development of government applications in public administrations (SIGIPES, EPROCUREMENT, etc.);
- the development of GPS based vehicle tracking services;
- the development of money transfer services;
- the development of the e-commerce (Kaymu, etc);

### **EDUCATION**

- the development of E-learning through MOOCS offered by several university institutions.
- the increasing number of university institutions offering lectures in the field of ICTs. Cameroon intends to train close to 5,000 engineers by 2020;
- the introduction of ICTs in primary and secondary schools' curricula, that shall contribute to building a society of ICTs literate citizens;

#### **INDUSTRIALIZATION**

- Many ICTs oriented private structures have been created, including application developers (SSII), IT equipment providers, maintenance companies, etc;
- Cameroon, under its Telecommunications/ICT sectors development strategy, intends to create an ICT equipment manufacturing industry to address people's ICTs inaccessibility issues, as a result of their costs which often suffer from various taxes, including Customs duties;