

"Insight of the TOP"

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At the Occasion of the APT Symposium for Spectrum Management, 3-5 September 2018, in Manila, Philippines. We had an opportunity to interview H.E Mr. Eliseo M. Rio, Jr, the Acting Secretary, DICT to talk about the current ICT policy issues and future perspective of the Philippines government.

“Broaden Potential of the Philippines with Broadband”

Q1) We understand that now the government of the Philippines is focusing on implementation of its National Broadband Plan. Could you elaborate what are the aims of the Plan and what kind of menus are listed on it?

There are several major components in our National Broadband Plan in terms of function of network. The first component is the national gateway facilities access to other countries. The second is the backbone then followed by the middle mile connecting the backbone to Point of Presence (POP) in every provinces and finally the last one mile to connect the Point of Presence (POP) to the subscribers. In our National Broadband Plan, our targeted subscribers are all government offices down to "barrio" level that is the smallest government unit. It also covers other agencies and organizations who take care of public services such as disaster management. Basically it is to connect about 42,000 barrio or villages to the national network together with overlaying VSAT system. In the Philippines, there are places where no terrestrial network can reach and we have to use VSAT system to connect them. According to our analysis, we believe that about 40% of our country needs VSAT system to be connected but some of them are still only at initial stage to be covered by our Plan. Until they would be connected by terrestrial links, either through submarine cable or optical cable by the cable TV operators, those places need to depend on VSAT system. So, including this functionality of VSAT system, there are five key factors in our terrestrial network. In addition to terrestrial broadband network, wireless broadband is also important for our Plan. We are trying to come up with a new idea and technology such as floating base station using balloons and drones. We studied some trial projects in this field conducted in Africa. Of course, such technologies are still a bit over the horizon and may take some time to be realized. Currently, VSAT system is more or less practical choice in terms of speed of implementation and stability of service.



Q2) What is the time span to materialize the Plan and to what extent it has been already implemented?

We have already started to implement it since last year. As a result, we now have two new links for international gateways. One is Aurora baler in the eastern side of the country, facing Pacific and the other one is in La Union western side of the country facing South China Sea. We will connect them with 250 km fiber optic cable and that project has already started and is expected to complete by end of next year or hopefully fourth quarter of 2019. This is a tripartite agreement signed with Facebook. Facebook has a submarine cable with huge capacity from Los Angeles to Hong Kong and it passes through the Luzon strait in the norther part of the Philippines. And that areas is hit by typhoon severely almost every year, which causes damage to the submarine cables. Once it is damaged, it usually takes about two months to repair it. Therefore, Facebook want to bypass that area to avoid being hit by typhoon. So we agreed that Philippine side provide land network between Aurora and La Union and in return the Philippines can use 2 Tera byte bandwidth capacity of submarine cable, 1 Tera byte with Los Angeles and 1 Tera byte with Hong Kong. The nice part is that Facebook is investing on the submarine cables and we invest on only two landing stations and optic fibers amounting to 1 billion Pesos. 2 Tera bytes capacity they are going to provide us is worth about 4.8 billion Pesos a year. Therefore, we get paid back in less than a year. We call it Luzon Bypass Infrastructure.

Q3) Is that 2 Tera Byte capacity owned by the Government? If so, what is your plan to utilize it?

Yes, the government owns it. That is why we have a plan to connect this capacity to our backbone from north to south in order to distribute the bandwidth. We are planning to use 6,200 km of our national fiber network that was the part of our SCADA system of our national grid. It has been there for more than 10 years and used only to monitor the national grid. But now it can be used in a better way by putting up additional equipment. Once it is connected up, it can be used to distributing bandwidth to the points in every provinces and municipalities. If I am not mistaken we will have 200 Points to be connected from north to south of the Philippines. Then we will collaborate with big operators for the middle mile part and with ISPs, cable TV operators and even community ISPs for the last mile part. As the core business of two major telecom operators (Globe and Smart) is mobile, the idea of fixed broadband will be competing with their service. But we believe we need to do something in order to facilitate consumers' benefit as we have one of the most expensive subscription fees of Internet here. The two major players would like all of us to connect to their Internet services as much as possible and currently people are connecting to their mobile services wherever they are, whether at home or at office. One of the way to reduce subscription fee is to utilize fixed broadband network where it is possible and we encourage them to offer fixed broadband. For that purpose, we will use the capacity I mentioned as a tool for collaboration. We believe that there will be a win-win solution.



Q4) What is the main role of the government and DICT in implementing the Plan?

Actually we are trying to connect schools, hospitals and transportation hubs and make them access points of free public WIFI. We are mandated to provide at least 200,000 access points by 2022. We started this program in 2015 even before DICT was formed. It is still not as successful as we planned to because private sector's investment on infrastructure is concentrated on only profitable areas. The project I mentioned, providing bandwidth subsidy to Los Angeles or Hong Kong, is one of ways to encourage their investment. We also offer the last-one-mile connectivity. In the future, we may have similar arrangement for other submarine cables waiting to bypass the same strait where there is typhoon problem. They may offer similar benefit like Facebook to our country.



Q5) You mentioned that subscription fee of the Internet in the Philippines is expensive. With regard to this point, what are the current policy and market trend?

Actually it was in 2016, when president ran for the election, it was one of his campaign promises to reduce the cost of the Internet access. It is because we have the worst internet speed and the most expensive access fee here in the Philippines and people are frustrated about it. Two big players of telecom service do not seem to improve the situation.

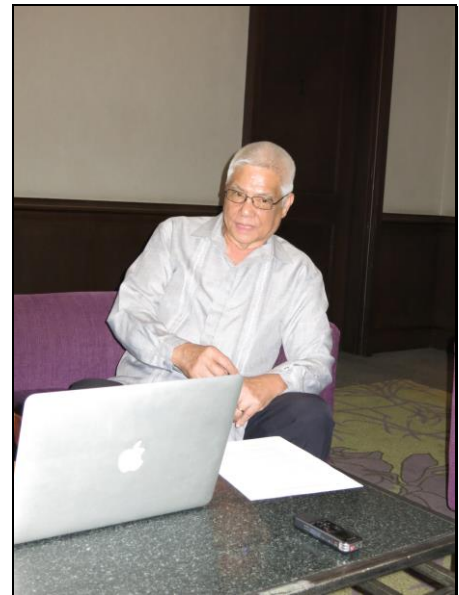
President said he would bring a foreign telco to improve the ICT industry, however, our constitution and other laws limits the foreign ownership up to 40% only. Now President has asked to amend the related laws so that the share of foreign ownership can be increased. We may have the law amended by the first quarter of next year. This is to attract the foreign telcos to come in and increase competition in services and bring the prices down. Talking about the infrastructure we still have only about 16,000 cell sites compared to other counties in this region. For example, I understand that Viet Nam has around 70,000 access sites even though we are way ahead of them almost by 5 years in terms of rolling out GSM network. To address this problem we are now looking at common tower providers and we have now 5 interested companies who will provide common tower to be leased out to the telcos in provinces. The telcos will be benefited because it has no tower at all right now in provinces. The reason that we lacked towers is that the SMS service and its market in the Philippines had been expanded very much for more than 10 years, from 2000 to 2014, and business model was adjusted to this market environment where many messages, with an average of 1.47 billion text messages in a day, were transmitted. As you know text messages can be handled well with less cell site because it is not a real time traffic but it can be queued. During that time we have three cellular service providers and they did a good business with 2G network. The third telco Digital Sat was also doing well until smart phone came in 2012 – 2013 and then we shifted from 2G to 3G and 4G, which required big amount of investment. Globe and Smart could cope with these changes because they have foreign partners. The problem is that they are not willing to share their networks or towers.

Q6) You mentioned that now the government is planning to amend the law to allow the new entrants with foreign investment. At the same time, incumbent doesn't want to share or co-location of their facilities and network. Doesn't it mean that new entrants would be required to make huge investment for establishing an infrastructure?

Yes that's why we are also planning to amend related laws in that regard. There are three laws and regulations in this context. One is Public Service Law that will increase the share of foreign ownership and the other one is Open Access Law which will require all operators to share their infrastructure, including the number portability as we still do not have number portability. We have to change number as we change the service providers. The open access is the one that will make it easier to share the infrastructure. Through these newly amended laws and regulations, new entrants would not need to establish their own network from scratch rather they can lease lines and concentrate on their service provision. The common towers concept will improve the number of cell sites. This will also benefit rural provinces with more accessible network and service.

Q7) For that common tower project, who are the potential candidates to offer such a service? Is it attractive enough to have competition?

Yes it is. Now we have five candidates for this project. And there is a school of thought that we should accredit only 2 out of 5 but there is also another school of thought that if we are limiting it to just 2, it may not work as there would be a duopoly. There is also a possibility to have a small tower provider in a small area for their business there. Another issue what we need to consider is that the incumbent telcos may franchise those small tower companies, if we allow it. Franchise is one of a good ways to expand your network nationwide but once it is franchised, we may not be able to force them to open it. For this project, how to finance CAPEX is the main issue. We believe that competition is needed for a better service and it is important how you analyze and expect business activities under new amended laws and regulations. In the end, we believe that market forces determine its course.



Q8) DICT is always helpful and supportive to APT activities. How do you evaluate APT's activity and what do you think about APT's path in the future?

DICT is just two years old as a department and of course. We would like to learn the best practices in other countries and relate them to our situation here. For that, we really need expertise from APT. For instance, the Terms of Reference (ToR) for selection process of third telecom operator was supported by the International Telecommunications Union (ITU). Similar support would be done by APT through Symposium like this time, expert mission, policy consultancy including regulatory aspects on variety of ICT issues. It could be an adviser for new



laws and regulations. We also want to learn business and technology trend as well as new available services so that our ICT policies and regulations in the Philippines would be always appropriate to promote industry and to serve for people in the Philippines.

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