

Day 2 Session 1 Discussion

Moderator:

From Dr. Lukito, the finding of USO field visit has been presented and from Ms. Kiyoko some of the definition, modul, and possible solution for rural area telecommunication also has been presented and also the NGN network development or research is actually has worked together with Dr. Armen Langi also it can addressed some discussion in yesterday's session.

Ok now, the time is yours, to have clarification or discussion. Maybe three person first because we only have 15 minutes but actually we can still continue raising the issue in the next session. So, please go ahead.

Yes, Ibu Koes.

Indonesia:

Thank you. From the first speaker you talked about the routing cannot be operated well. Is it the routing because of the technology itself or because there is no, for example, interconnect or things like that that the work doesn't work.

And the second one, you also identified the problem on the power in the rural areas. Could you give any solution on what kind of power actually best for the rural application. I think this one first. Thank you.

Dr. Lukito Edi Nugroho:

Thank you Bu Koes.

Well, when I talk about the problems that not necessarily come from the hardware of the equipment then, what I mean is that it may come from the settings. It could be the setting in routing machine; it could be the setting in perhaps in the handset. So, for example, if the technician put the IP address incorrectly then it could lead to a problem.

So, that thing is what we meant as the problem that is raised by non hardware causes. In terms of power, well, like what we found out in a location in Malaysia, the tower is powered by diesel, so it's not powered by electric lines, but by diesel. Because the voltage is fluctuating, so it's not very reliable if they use the power lines. So, that's why they use the diesel.

Well, I think, that one possible solution but actually the solution may also depend on the location, the geographical location. For example, they can use the micro-hydro power generator or they can use power from solar energy. So I think there will be many kinds of solution for power problem. Thank you.

Mr. Eka Indarto:

USO application integrated solution for all stakeholders, by example in rural area in Yogyakarta especially in Gunung Kidul, partnership operator, the government, educational institution result significant growth of internet to school as learning center

for the society. Medium school as a Karangmojo Gunung Kidul in 24 accreditation as local school in 2007 go to international school with the support of the rural NGN service.

Moderator:

Perhaps there's additional information about the implementation of NGN and the impact of the quality of the academic service in the rural. Any additional discussion, maybe.. OK..

Malaysia:

Questions on Dr. Lukito's findings on page 10. I was just wondering the findings that you have on page 10 of the handout, is that for both Indonesia and Malaysia, or particularly on Malaysia.

Dr. Lukito:

It's a general finding. it applies to Indonesia and Malaysia.

Moderator:

Well actually, there is an important discussion yesterday about IP and NGN and related with the how to manage numbering, etc., actually in these presentations, maybe if you have one proposed solution by Mr. Eka. is should be user based numbering system. Maybe we can elaborate more in the discussion, but the idea is that we have to move from network planning into resources based management. Because if we deal with the NGN and IP based network and wireless system so lots of resources should be managed, the first is, like numbering. And the second is IP address and the third is radio frequency. They have become new issues because the physical network is not very important actually, because lot of hybrid tech could be implemented. But the issue is how we can manage all of these resources.

So, this approach will be new approach and it will influence the policy recommendation or policy statement in the near future. OK, maybe any additional discussion from the floor, otherwise...

Indonesia:

Responding to your request yesterday, I make about 6 slides about the issues of numbering and interconnect.

[These slides can be seen at Annex 4.8.]

Moderator:

In Malaysia, we also find that one of the problems is the IP setting, because the IP setting in the handset is very easy to change even by unskilled person, because it is open. So actually during our visit and the discussion, we found out that they change IP. Some kids that change IP, I'm not sure about how old they are, but they can change the IP directly within the handset. So, that's one of the issues and the other issue is the cabling configuration. Because the cable from the antenna for the handset is similar. Actually in our visit, they put the configuration not properly. And then when we come and they switch. And actually their kids pull it off and put it again in wrong position.

And then other issue, is the static and dynamic IP because the IP is very limited, it should be in dynamic, but in the current system it's static, and they found that with the static resources we need lots of resources, so I think the user based identification number.. User based numbering system will be essential to be implemented in the

future. So, other thing we found during our visit in IP based technology is power supply in the handset. Because some of the user in the village do not understand how it works. So when they not use this equipment, they just plug off the power, so the computer or the handset was shut down and in the central they cannot recognize whether the equipment is still on, off, or broken. there is no identification about this equipment.

Malaysia:

Before we continue, there's just one question about this NGN. Would you allow me. Well, I'm kind of interested on the approach here by rural NGN proposed by ITB. Definitely some other countries would like to look at this, Myanmar, in particular how to expand at the same time implement NGN based infrastructure that was support multi services coverage network. So this wonderful approach must due to the fact that the multi service coverage network that we plan to implement in Lawas, near to Sabah border, the IP based would require some enhancement for the existing 2.5 based network to support MSCN (multi service coverage network). While, the thing is, as you point it just now, there are issues of resources, we have the introduction of the NGN, we foresee that most of the rural CPE (Customer Premise Equipment) would be IP tech.

Now, we are actually facing global crisis on IP-4 allocation. So whether the government of Indonesia has looked to this aspect of acquiring more IP addresses, especially IP 6. And are whether regional collaborator established with Japan and Korea has some understanding on this without which the Asean platform across the Asean member countries will only stop on paper. Because the end user cannot be benefited from this approach due to the lack of IP address.

That is the first question.

And the second question is what the current infrastructure layout situation is topology-wise for Indonesia as far as the NGN is concerned. Is there the availability of the MPLS structure to support the soft switching of the toll and traffic and how do these contribute to the some form of integration to the rural level. Because as far as the MPLS is concerned, it is most likely to be implemented in high density area, where tally density is very high because of this capacity issues and as far as today, I have not seen any localized MPLS implemented in rural level which is for the small scale.

That's all my question. Would appreciate any kind of clarification.

Eka Indarto:

In Indonesia, the association of an internet provider service develop IP6 tool two years ago in partnership with DG Postel. IP6 is today implemented and embedded in local exchange and national exchange. Operator integration to IP6 once applied IP 6 to the association to get to address the allocation.

In the last mile, the provider provides to rural which an integration of IP4 gateway to IP6. In the test bed in Yogyakarta to Kebumen area, the IP6 work well.

Indonesia:

Perhaps I can add a little bit, because the IP6 is still on trial and then the trial is during the conference we proved it works, but it still requires some testing. I think there is ten kinds of testing and it's still on going on doing the testing. I think the coordination of the APJI.. APJI is the internet provider association in Indonesia..

Malaysia:

Are you saying that the result of the test bedding of this IP6 compliance application will concurrently determined your roll out progress for NGN, isn't it?

Indonesia:

Yes.

Malaysia:

Then it cannot go, I mean one step earlier than the other because you require IP, unless I mean you have ample application on the IP addresses that only can loop into very progressive, very last scale net session that would NGN deployment. If not, well.. the rural message for Indonesia is larger to other countries, I would say one of the most populous countries.

This is a crucial issue to be address, because at the end of the day when you talk about the next generation network, it is not about the infra layout, but the ability of the community to be uplifted in terms of their socio economic pedigree, as well as their accessibility options to the network itself and some entrepreneurial scheme to be introduced to those people which are require them to have more access to other IP based knowledge information.

So you are to develop that sustainability model for rural community, they too are given rural access more IP based solution. because I don't think that rural NGN solutions will stand on its own if there is no complimentary activities from the user side, as to develop sustainable model also based on IP technology, hence the requirement of IP to be widely available to that people.

In Malaysia we have already focusing on that problem because not that many IP available and not that many apparatus can be target with IP, mostly the urban sector requires, I think almost above 95% allocation that is over and above our existing saturation point. And I think the call probably on countries who develops the IP 6, like Japan and Korea, for they maybe consider more allocation of IPv6 to developed countries especially for AMC – Asean Member Countries, otherwise very being very depleted in terms of existing IP resources.

Indonesia:

I'd like to comment on that, because the government has now decided that all that e-govt, must use the IP version 6. The e-government has to make the initiative of using the IP version 6. Because the application of the IP version 6 is very important. Therefore, for the government has to initiate any e-govt will have to use IP version 6.

AWM:

I think we can continue on this issues, because I think these are important and difficult issues to be solved.

Koesmarihati:

Ok, thank you.

[These slides can be seen at Annex 4.8.]

We will talk about the funding like Indonesia in 1990 something has directed funding for rural areas, around 20% of investment should deploy in rural area, but it was not work very well because they still keep the investment in the urban area. Maybe state budget is one of the policies of Myanmar financed by state government. We will talk about funding management, and tender mechanism, maybe we will observe what the incentive is for the bidders and how the subsidy should go and some of the tender principles.

Ok in the case study of Malaysia and Indonesia, we found that the definition is a bit different, there is obligation and provision. And Indonesia is actually moved from play

to pay because Indonesia is previously in the direct investment in rural area so it means pay the 20 % investment in the rural area but now it's going to pay with 0.745.

But now Malaysia is maybe from the option pay or play to play. Please correct me if I were wrong.

Indonesia:

Because when we say obligation before, the only operator at that time is only the incumbent today.

So they are obliged to do it part of the network. but afterwards, there's a competition there are so many operators so, when you have a competition where you cannot ask somebody to build something that is not commercially viable. that's why we decided to have all contributed and the contribution is used for USO fund.

And also, they have to have some degree of tendering, because when we ask the incumbent or the only operator doing it, they're not doing it efficiently, they're doing it whatever they want, not according to the government's want to have. So, the benefit now, that the fund is hold by the government and the government can give the priority, the place that they know is more important to build, and also the most efficient way.

I think that's the background. From obligation that the Telkom at that time was the only operator, the incumbent, and later on because of so many operators that have to contribute the fund for the USO.

Malaysia:

If I may clarify, that was probably the context of Indonesia.

I think there is some underlying reason why we institute this scheme as a continuity of USO. The main reason being is the underlying philosophy of both from the government perspective and the service operator perspective, we call them the service provider, in Malaysia, now, as it is, they are expect some commercial viability which limit the operator to deploy in the rural and underserved.

That is service operator perspective, then, however the government must be thinking that there must be some mechanism to impose on operator to discharge their CSR (Corporate social responsibility). So through the mechanism that we device and call the USP.

On the other hand, there's also the government perspective, of rolling out services to the rural and underserved being our obligatory role to make it happen in the rural. so I think then the subsequent logical impact on this approach, CSR, lead into USP scheme in such a way that we the government wants to implicate the service providers through means of imposing the scope of works to deliver.

To provide the services to end user. so I think in terms of the philosophy when we use USO/USP. USP or the words provisioning gives more emphasize and liberate more on the corporate social responsibility that needs to be discharged from the operator for the benefit of realizing the social obligation roles of the government. So, it's a dual aspects of the involvement.

Basically, that is the rationale. Then again, finally, the licensing framework of the Malaysian government under the Communication and Multimedia Act allows for an open entry into the so called structure by which to offer imposing all licenses. Except, the broadcaster to contribute, therefore to pay compulsorily then they will be allowed to recommend the best approach in rolling out the service provisioning in the USP target area through tender bidding.

So, it has to be proactive.

So, we are no more imposing a particular company, let's say the incumbent and we no longer impose rather severe key performance indicator on them to satisfy our

expectation. But rather, opening up through self regulation approach, again, the CSR to the service providers.

In Indonesia conducted in villages with no telephone access, in Malaysia, conducted in areas under 20 percent served. In Indonesia conducting scheme for performance based contract actually like pay the service system, the government pay the service form the operator and then from Malaysia, use USP scheme of no gain no loss. There is some incentives scheme for the bidders.

Indonesia don't prepare incentive scheme in license and then in the fixed wireless access that is 2.3 and then the interconnection and also profit margin, in Indonesia, the incentive scheme is about 10-20 percent profit margin in the owner estimate.

And also the revenue because in the near future, the implementation of the USO is using scheme net contract, with the revenue goes to the operator. In Malaysia, actually the incentives are capital to the infrastructure investment and USP claims exclusivity. If I can mention, in certain district if certain operators win the biddings, they will have the exclusive right.

Malaysia:

The correct word is designated.

When an operator win a contract, not a contract actually but USP job, we will allow them implement in area in which they have very strong POP and those areas that we award to them will be identified as designated area.

For those project occurring in their designated area. so, it's yes or no, when it comes to exclusivity. Yes, because there are territory, after all, and there are very significant plan for that particular area. no, because our regulation give the freedom of any other provider beside that designated provider to also bid for the tender. so, I think let's omit the word 'exclusive' because USP scheme has moved forward into internet connectivity, broadband, etc., current phases of funding for telecommunication towers.