

Numbering & Interconnect issue in USO

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Numbering Issue (1)

- From the presentation by AMC in the TAU Seminar :
The Country is divided into several USO Areas : eg
Indonesia by 11 USO area which each covers several
area codes
- The USO practices,
 - Technology used :
 - Extending the Cellular Network - by Cellular operators
 - Extending the Fixed Network – by PSTN operator
 - New Technology – IP based network – using IP-VSAT by new
operators
 - Tariff applied :
 - Lower than PSTN tariff
 - Service offered
 - mostly voice in the form of public telephone
 - In some place internet kiosk

Numbering Issue (2)

- The telecom numbering is following ITU numbering E.164 hierarchy , the country is divided into :
 - for geographical – divides into many area codes : and numbering becomes :,
 - (country code) (area code) (telp number)
 - For non-geographical (mobile), every operators has different access code and numbering :
 - (country code) (telp number, which already inc. access code)

Numbering Issue (3)

- For IP numbering is following ICANN and usually is not coordinated by Regulator, and not coordinated by Regulator.

Future expectations

- Services offered :
 - Provided by 256 kb/s which will offer
 - Voice, data, internet as well as e-health, e-education
- Technology used :
 - IP network : NGN, WiFi, WiMAX,

Numbering solution

- There is a combine effort , introduce by IETF, ENUM – Telephone Number Mapping – which make possible that the IP-network connected to the telco numbering by mapping the telco numbering into DNS

Interconnect Issue

- In the telecommunication regulation, telecom network providers are obliged to interconnect with the other providers network;
- The dominant operators has to declare the term, condition and tariff of the interconnect;
- For the new network using the IP- network , how could we ensure the interconnection to the other operators ; IP to telco network
- Will we issuing the IP-network with fixed- network provision, and getting block number from E.164 system numbering, but where they have to interconnect, since usually they will have only one exchange (could be in the form of soft switch)