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 Malaysian Communications and Multimedia Commission

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## INTERCONNECTION (2): Mongolian Scenarios

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### AGENDA

- Interconnection Status in Mongolia: issues
- Recommendation for interconnection settlement between operators in Mongolian context

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## FACTS ON THE GROUND


4 procedures are applied:

- Procedure to establish agreements
- Methodology to set interconnection charge
- Determination terms and conditions of interconnection
- Define demarcation points

Types of interconnection:

- **Fixed to fixed**  
e.g. Mongolia Telecom to Railway, Railway & Mobicom, Skytel & Railway etc. /
- **Fixed to Mobile**  
e.g. Mongolia Telecom & Mobicom, Mongolia Telecom & Skytel

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## FACTS ON THE GROUND

### Economic side of interconnection

Mobile to Mobile / e.g. Skytel & Mobicom, the revenue sharing principle is applied to Fixed & VoIP interconnection.

Mongolia Telecom & Mobicom and Mongolia Telecom & Skytel interconnection complies with this revenue sharing principle, however Mongolia Telecom & Micom company interconnection does not

- Why? Micom is a subsidiary/ daughter company of Mongolia Telecom.

Initially, economic aspect of interconnection is settled by the revenue sharing method not cost based regulation and two parties or interested parties conclude agreements on revenue sharing.

Further, the CRC is planning to regulate it on cost based methods first and to update the revenue sharing principle.

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## FACTS ON THE GROUND

### Economic side of interconnection

In interconnection of ISP to fixed, the revenue sharing principle does not apply at the moment, and interconnection is burdened on customers.

However interconnection of domestic long distance between mobile and fixed has a fee problem. A mobile customer in rural areas is able to make a call to fixed customer not depending his or her location and in this case, interconnection fee are used as same as local tariff instead of domestic long distance tariff.

### Technical side of interconnection

In technical aspect of the interconnection, there are no cases unbundling and resale except one case which was removed. However, infrastructure sharing and collocation are practical in interconnection on the side of technical condition.

**RIO / Reference Interconnection Offer, is in the process of preparation.**

## ELEMENTS OF INTERCONNECTION

### Definition of Interconnection

- "Interconnection" means access

### What services covered by interconnection?

- A list of network facilities and network services

### Should CRC determine what services should be offered as interconnection service?

- RECOMMENDED

### Development of Standard Access Obligations

- SAO refers to the obligation of an "Access Provider" to provide access to the listed network facilities or network services on reasonable terms and conditions to an "Access Seeker"

## ELEMENTS OF INTERCONNECTION

### Interconnection Rates

- Is it commercial negotiations or regulated?

### Costing study or benchmark?

- Is data sufficient to conduct costing study?
- International benchmark then costing study

### Costing Methodology

- Historical cost vs current cost, or
- forward looking long run incremental cost ?

### Costing Standard

- LRIC – TSLRIC, TELRIC

## ELEMENTS OF INTERCONNECTION

### Access Forum ? Maybe ?

**Access Code** -recommended

**Access Undertaking** - useful

**Access Agreements** – similar to RIOs

**Access Dispute** – Independent regulator, CRC

**License Condition** – can you put it in ?


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## REGULATION VS SELF-REGULATION

**Malaysia's experience**

- Notwithstanding the Commission's initiative on Mandatory Standards for Access, industry self-regulation for Access has always been given ample opportunity and support to develop
- The Commission's initiatives have always involved industry's and public participation
- In its efforts, the Commission has always built in flexibility in that the industry self-regulation efforts will always takes priority and precedence over the Commission's own initiatives

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## So, what do we do in Mongolia ?

- Establish guidelines in advance of negotiations
- Setting default interconnection arrangements in advance of negotiations
  - RIO is one example, so people know what the worst can be
- Establish deadlines for various stages of the negotiations
- Towards self regulation & capacity building
  - Establish Industry Technical Committees
- Provide incentives to complete interconnection arrangements
- Appointment of mediators/arbitrators

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## So, what do we do in Mongolia ? (2)

- Conduct simple pricing study
  - Provides a reference to ensure that incumbent is not charging for inefficiencies
  - Can be based on Forward Looking Incremental costs, historical accounting costs, Bill and Keep, Revenue Sharing, Interconnect charges based on retail prices
  - Or other formula
- Cost/pricing is a major aspect to interconnection

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## Principles for efficient interconnection price structures

- Interconnection charges should be cost based
  - (ideally long run average incremental costs, including costs of capital, plus a reasonable mark-up to cover forward looking joint and common costs)
- Where information is available, costs should be based on the current replacement costs of assets (discounted to their remaining service life); in the absence of such costs, depreciated book value of assets is sometimes used
- Interconnection charges should be sufficiently unbundled so that an operator seeking interconnection need only pay for the components or services it actually requires
- Where the cost of a component varies significantly in different locations, the interconnection charges should be disaggregated
  - E.g. costs of access lines may be higher in the rural areas than in the cities

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### Principles for efficient interconnection price structures

- Charges should not include hidden cross subsidies, particularly of an anti-competitive nature
  - Eg. Charges for monopoly supplied network components should not be inflated to a level well above costs in order to fund below cost provision of competitive components (see WTO)
- Structure of interconnection charges should reflect underlying costs. Thus fixed costs should be covered by fixed charges, variable costs by variable charges. Peak and off peak charges should be set where there is significant difference in costs



**THANK YOU**