### **Mobile Number Portability in South Asia**

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# What is MNP?

• Allows subscribers to retain their phone numbers across all operator networks

#### **Motivation for study**

- Typically available in developed telecom markets
- Increasing interest in emerging markets
  - Pakistan in 2006
  - India in 2010
- Large prepaid segment
- Different subscriber dynamics
- Question of suitability?



### **Research question**

#### How applicable is MNP in South Asia?

- Case studies
  - Pakistan
  - India
  - Maldives



# Methodology

### **Data collection**

- Extensive literature review
- Semi-structured interviews
  - Pakistan, India and Maldives
- LIRNE*asia*'s teleuse@BOP3 survey
  - Large sample survey
  - Multiple countries, including Pakistan and India



# **Rationale for implementing MNP**

	Merits	Demerits
Subscribers	Lower switching costs	Search costs
	Better services	Hassle of porting process; Missed calls/opportunities during porting
		Unaware of call termination rates
Operators	Opportunity for more subscribers	Pressure to retain subscribers
	Level playing field for new entrants	Cost of implementing facility
		Advertisement and investment costs
Regulators	Improved competition	Technical expertise required
	Lower prices and better QoS → satisfied subscribers	Resource heavy



## Measuring the 'success' of MNP

- High porting rates = cost-recovery = increase churn/improve competition = MNP success
- High porting rates
  - 6% and over
  - Hong Kong, South Korea and Australia
- How?
  - Low porting time
  - Zero or no porting charges
  - Subscriber awareness
  - Entrance of disruptive operators



### However, most have failed...

- Low porting rates = economic failures = MNP fail
- Japan, Singapore, The Netherlands, Ireland, Malta and UK
- Why?
  - High porting charges
  - Lengthy porting times
  - Long-winded applications
  - Handset subsidies
  - Homogeneity of service



# **Policy implications**

- Technical expertise
  - Network re-routing
  - Database maintenance
  - Recipient or Donor led porting
  - Upgrading of networks
- Tariffs, interconnection and cost allocation
  - Who should pay? Should every subscriber pay for the service or only those who port?
  - How much should subscribers pay?
- Numbering plan
  - Operator codes rendered useless
  - Clears up blocks of numbers for re-allocation
  - Transfer of property rights to subscribers



## **Preconditions for introducing MNP**

	Criteria	Measurement	Why
Subscribers	Demonstrated demand for MNP	Market size, consumer behaviour	Gives an indication of potential demand for MNP
Operators	Competition	HHIS	Helps to ascertain how much impact MNP can have on the market
Regulatory body	Independence and/or effectiveness	LIRNE <i>asia</i> 's Telecom Regulatory Environment (TRE) tool	Drives implementation, ensuring a win-win situation for both subscribers and operators



### **MNP in South Asia**





# Preconditions for introducing MNP in South Asia

	Pakistan	India	Maldives
Subscribers	169 m population;	1.18 b population;	396,000 population;
Demonstrated demand	105 m mob subs	573 m mob subs	501,809 mob subs
for MNP			
Operators	0.33	0.16	0.66
Competition (HHIs)			
Regulatory body	3.4	3.0	3.5
(LIRNEasia TRE score,			
2008)			



# Pakistan's experience

- Porting rates between 2-3%;
  Postpaid porting 0-1% only
- Porting time of 4 days

Pakistan	
Subscribers Demonstrated demand for MNP	169 m population; 105 m mob subs
<b>Operators</b> Competition (HHIs)	0.33
<b>Regulatory body</b> (LIRNE <i>asia</i> TRE score, 2008)	3.4

- Reasons for porting: network quality, coverage and value added services (VAS)
- Regulators deem it a success
  - Improved competition, QoS  $\rightarrow$  falling subscriber complaints
- Operators say results not as hoped
  - "But it could have been worse"
  - Lack of awareness among subscribers



# **MNP in India**

- Mobile teledensity is 49%
- 95% prepaid segment
- At the BOP:
  - Multiple SIM use
  - Low number loyalty
  - High reliance on friends-and-family discount packages
- High level of competition
  - Stagnated since 2008
  - ARPUs between US\$ 2-3
- Effective regulator



India	
Subscribers Demonstrated demand for MNP	1.18 b population; 573 m mob subs
<b>Operators</b> Competition (HHIs)	0.16
<b>Regulatory body</b> (LIRNE <i>asia</i> TRE score, 2008)	3.0

### How suitable is MNP in India?

- Large market so porting potential is high
- BUT
  - High-end business users likely to opt for porting prime concern is no difference between service quality
  - Cannot expect too much improvement in price competition

Potential for MNP However concerns need to be addressed



## **Porting statistics since introduction**

Item	Zone 1 (m)	Zone 2 (m)	Total (m)
MNP requests	5.1	3.9	9.0
Actual porting	3.6	2.7	6.3
Rejections	1.3	1.0	2.3

Cumulative portings from November 2010 until 10 May 2011.

Operator	Total Subscribers (Mn)	Net addition (000s)
Vodafone	127.36	196,761
Idea	84.29	150,789
Bharti Airtel	155.80	148,215
TTSL	86.05	-39,389
BSNL	88.92	-150,093
Reliance	128.87	-306,417



### **Recommendations: Concerns for India**

- Charges for MNP only for those who avail of service capped at INR 19 (USD 0.42)
- Porting times kept at a minimum 7 days, but service disruption time is 2 hours overnight
- Allow more firms to enter the market
- Increase subscriber awareness
- Location portability more appropriate?



## **MNP in Maldives**

- Small population
- Teledensity is 140%
- 90% prepaid segment
  - Multiple SIM use
  - Low number loyalty
- Low level of competition
  - Only two operators
  - ARPUs are high US\$12-13
- New regulator
  - Lacks independence, expertise and resources

# Low potential for MNP Should consider alternatives



Maldives	
Subscribers Demonstrated demand for MNP	396,000 population; 501,809 mob subs
<b>Operators</b> Competition (HHIs)	0.66
<b>Regulatory body</b> (LIRNE <i>asia</i> TRE score, 2008)	3.5

## **Recommendations: Alternatives for Maldives**

- Operators should facilitate number changes when requested
- Regulator should improve competition by other means
  - Tarff regulations to manage difference between on-net and off-net call rates
  - Limit anti-competitive behaviour
    - Dhiraagu's control over the market and regulator should be reduced



## Key issues for MNP in South Asia

- Subscriber dynamics
  - Low number loyalty
  - Reliance on cost saving strategies
    - Multiple SIM use
    - Locked in to discount deals
- Budget network service model of provision
  - Low cost, low ARPUs
  - High network utilisation
  - Exploit long-tailed markets



### **Summary**

- MNP will have
  - Will not affect BOP segment
  - Limited impact on price competition
- For large countries like Pakistan and India
  - Makes sense but will have to try hard for success
- For microstates
  - Low likelihood of successful MNP





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