International Mobile Roaming Services: A Review of Best Practices

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Recommendation ITU-T D.98

D.98, Para. 5.3 Regulatory intervention
“Regulators and policy makers, taking into account specific national or regional conditions, may introduce regulatory interventions on international mobile roaming service tariffs for the benefit of users by encouraging competition. Possible interventions may include a range of regulatory measures such as usage alerts, bill caps, tariff caps and pre-selection.”

ITRs (12/2012)
“Member States shall endeavour to promote competition in the provision of international roaming services and are encouraged to develop policies that foster competitive roaming prices for the benefit of end users.”
Defining the problems

- Wholesale mobile roaming prices are **high** (and well above costs) even though “…the costing elements are substantially the same for fixed line network termination and mobile network termination” 5th meeting of SG3 (2002), “[emphasis added] resulting in……..

- High international mobile roaming (IMRS) retail prices & **Bill Shock**
- Unlike national markets IMRS markets are not contestable so it is difficult to create sufficient competition ....

- ..and complicated because it is also a cross-border issue: the service operator in the visited country controls access by a visiting subscriber from another country when that subscriber roams in the visited country;

**What is best policy and regulatory practice?**
“Relevant markets”

- Receiving a call in a visited country
- Call from a visited country to the home country
- Call made locally in a visited country
- Calls from a visited country to a third country
- Mobile Internet (roaming)
- MMS/SMS (receiving/sending)

**Demand characteristics:** Accessibility (keep number); mobility; coverage; single subscription.

**Supply characteristics:**

- IMRS market is similar to the mobile termination market (enduring bottleneck) but differs in that national regulators can only intervene to regulate the retail margin on IMR services imposed by their national operators on wholesale charges from country B - retail charges are usually only a small proportion of high IMRS charges;
- Dominance in the international mobile origination and market access because there are no effective supply side substitutes and no effective demand side substitutes
Cost factors in making/receiving a call to/from home country

- Retail margin on IMRS (can be regulated by home regulator)
- Fixed/mobile termination in home country (usually regulated)
- Mobile origination/termination in visited country (not under control of home country)
- International transit (difficult to regulate, but distance is not an important cost factor)

<table>
<thead>
<tr>
<th>Countries: Kms from France</th>
<th>Call to</th>
<th>Receive from</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 - 1800</td>
<td>0.34</td>
<td>0.34</td>
</tr>
<tr>
<td>8000</td>
<td>0.34</td>
<td>0.34</td>
</tr>
<tr>
<td>8600</td>
<td>2.9</td>
<td>1</td>
</tr>
<tr>
<td>8800</td>
<td>1.75</td>
<td>0.3</td>
</tr>
<tr>
<td>10800</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>15200</td>
<td>0.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Countries</th>
<th>€/MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1.00</td>
</tr>
<tr>
<td>Japan</td>
<td>1.00</td>
</tr>
<tr>
<td>China</td>
<td>13.31</td>
</tr>
<tr>
<td>Korea</td>
<td>13.31</td>
</tr>
<tr>
<td>Panama</td>
<td>25.00</td>
</tr>
</tbody>
</table>
Some progress, but insufficient

- Recognition of problem of high IMRS prices in most regions but different pace in searching for resolution;
- Action at bilateral, regional and international level;
- Companies reacting to pressure: lowering prices, special roaming packages;
- Regulators taking action;
- Technology developing & “near” substitutes diffusing.
Best Practice: main areas for action

- Empowering users – potential reduction in IMRS charges and bill shock;
- Creating competitive conditions in market (including facilitating substitutes);
- Regulation of prices;
- Structural solutions aimed at developing effective wholesale and retail price competition – complex and requires intrusive regulation but can lead to a longer term solution and lifting of regulations;
- Regional & International initiatives
Empowering users: education & transparency

- Increase awareness of high prices: change consumption when roaming avoiding “bill shock”;
- Require clear & easy access to roaming tariffs;
- Provide information on alternatives e.g. purchase local SIM, use WiFi, other messaging applications;
- Information on disabling data roaming applications;
- Informed on arrival of roaming charges;
- Pre-determined caps for data roaming & information on when limit is being attained;

**Increased transparency will not help in reducing IMRS prices faced by users**
### Call charges using airport rental operator versus French operator (in Euros)

<table>
<thead>
<tr>
<th></th>
<th>JP operator 1</th>
<th>JP Operator 2</th>
<th>FR Operator</th>
<th>To RoW</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM/Rental</td>
<td>Free</td>
<td>32€/week</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Incoming calls</td>
<td>Free</td>
<td>Free</td>
<td>0.30€/min</td>
<td></td>
</tr>
<tr>
<td><strong>Outgoing calls</strong></td>
<td>1.91€/min</td>
<td>3.3€/min</td>
<td>0.34€/min</td>
<td>2.90€/min</td>
</tr>
<tr>
<td>Outgoing SMS</td>
<td>1.0€/message</td>
<td>1.24€/message</td>
<td>0.24€/message</td>
<td>0.24€/message</td>
</tr>
<tr>
<td>Incoming SMS</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>Data roaming</td>
<td>17.8€/Mb</td>
<td>27€/Mb*</td>
<td>1.0€/Mb</td>
<td></td>
</tr>
</tbody>
</table>

*Or unlimited per day for 87€/week

**To France; for JP1 outgoing to RoW=1.19€/min & for JP2 ranges from 3.3-6.2€/min
**IMRS substitutes – not perfect**

- No incoming calls to user’s home number (e.g. local SIM);
- No mobility (WiFi access);
- Need unlocked terminal;
- In some cases need to sign up for yearly contract;
- Coming soon: (1) “Project ....promotes international voice, SMS, and data worldwide without a penny of roaming charges..” (2) App lets you buy local prepaid data services at local rates in +200 countries - data package loaded onto a universal SIM card
Creating Competition (1)

- Level of domestic mobile competition in visited country is important – but does not guarantee low IMRS prices;
- Availability of free Wi-Fi in visited country?
- Termination rates faced by call originating operators impacts directly on retail prices they can charge & their flexibility in structuring retail offers;
- Technology neutrality policies– e.g. allow VoIP especially apps on Smartphones;
- Shift to flat rate packages (mobile data) has helped;
- Bilateral/regional initiatives/ international initiatives
Creating Competition (2)

- Easy MVNO access & no FDI restrictions;
- Traffic redirection & large footprints (but challenge for small MNOs);
- Calling China from UK (China Telecom) for €5.90: 250 mins. to mobile or 500 to landline or 50 SMS;
  e.g. Zain in Africa
Creating Competition (3)

- Encourage substitutes to IMRS;
- Provide dedicated web site with information on substitutes & drawbacks of substitutes;
- Liberalisation of international gateways;
- Unlock phones (allows purchase of local SIMs);
- Direct action e.g. Bahrain's TRA instructed mobile operators to implement reduced tariffs by 75% for international calls made to Gulf Cooperation Council countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE) while roaming in those countries – most regulators do not have this authority.
Price Regulation

- Government authorities need to have legal power to enforce price regulation;
- Regulate wholesale rates or retail rates, or both?
- Transparency of wholesale prices;
- Action only against wholesale rates assumes market is working & will pass on price reductions to end users;
- Experience shows that this happens but very slowly;
- Action against retail could lead to margin squeeze;
- Action at wholesale & retail level has rapid results;

Price regulation lowers prices - does not solve long term problem
Structural Measures

- Separating home and visited market (EU). Implies that a subscriber can choose an IMR service before leaving home country (keep number);
- "Local break out" for mobile data services allowing visitor to choose a data service provider in visited country (EU);
- Creating IMRS as a separate market - allow domestic MVNOs to have access to network resources in the home market (at local termination rates)...
- ... and agree with authorities of visiting countries that these MVNOs can access visiting country markets on a non-discriminatory basis.
Regional/Bilateral Initiatives

- European Union: Price caps imposing downward glide path (retail/wholesale), reference offer for roaming (cross-border access i.e. roaming an interconnect service), structural measures (separate roaming services from domestic mobile services) + transparency;

- Arab Regulators Network: 'glide-path' for wholesale rates based on retail prices for similar calls in each country +30% mark-up (no agreement, but follow-up by GCC);

- Communication Regulators’ Association of Southern Africa: increased transparency;
Regional/Bilateral Initiatives (2)

- APECTEL & APC: 3 sets of guidelines - provision of consumer information, for regulators & operators to provide information;
- ASEAN: Record of Intent - roaming across the 10 member countries at same charges as in home country;
- Latin America (e.g. CITEL), Caribbean Community: issue under study;
- BILATERALS
  - Singapore, Brunei, Malaysia;
  - Australia & New Zealand;
  - Finland, Russia, Poland;
- In general bilaterals more rapid than regional or multilateral arrangements;
Cross-border agreements

- Domestic ICT regulators do not have any jurisdiction over wholesale rates – need to cooperate with other regulators/Ministries;
- Bilateral or regional agreements: some concern regarding most favoured nation obligations;
- Bilateral agreements should be made open to third countries that agree to meet the same terms and conditions as the initial bilateral partners;
- Global (WTO) agreement would be the preferred way forward, but slowest & most difficult;
Criteria for agreements

- Need to be clarify responsibility of regulators, methodologies used & data requirements for monitoring IMRS markets. Could provide scope for structural measures if needed;

- Could provide for 3rd party membership if they meet stipulations in agreement & can enforce & monitor them;

- EU consideration could be given to allow non-EU participation in framework if participating countries can legally ensure full compliance with framework;
Criteria for agreements

- WTO may need to determine the applicability of existing commitments to IMRS & encourage regional economic integration agreements covering telecom to open up the mobile roaming market to competition;
- The ITU can help in developing and diffusing best practice regulation for IMRS, notably in revised ITRs, and in particular acting as a forum to exchange experiences based on the lessons learned by those countries that have already moved forward and taken action to lower prices and develop competition in IMR markets.
GSR2012 Discussion Paper

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