A briefing note on

International mobile roaming

Ewan Sutherland

Introduction

International mobile roaming is never bought as a simple, single service. For consumers it is part of a bundle including a handset, access, call origination and termination. For operators it is a reciprocal – if not always equal – exchange of customers, traffic and functionality. Even for regulators, roaming comes as part of a bundle, being one of many issues including number portability, national roaming and mobile termination rates about which they must engage operators.

When purchasing roaming the vast majority of customers do not consider the prices to the extent they should and sometimes not at all. This often leads to *ex post* complaints to regulators about the high costs of roaming. Indeed, such reporting seems likely to be understated because many customers are pre-paid and have little evidence of the charges they have incurred.

For an operator, for example, in the Bahamas it is commercially valuable to have a facility for its customers to roam in the United Kingdom. However, the attraction of signing contracts with all four UK operators is not to improve coverage there, but to increase the pool of potential visitors roaming to the Bahamas. There is very little evidence in the UK that operators compete with each other in terms of differences in coverage, with all striving to provide extensive networks. It is doubtful that a visitor would notice the differences in coverage between the available networks. The same argument applies for the UK operators in respect of wanting to sign contracts with all operators in the Bahamas to maximise inbound revenues.

The introduction of traffic direction technologies in the past few years has changed the dynamics of the wholesale market. Operators report the ability to retain up to or even more than 90 per cent of roaming traffic on their partner networks. Consequently, the competition is to be a partner of the largest networks in order to capture roaming traffic at source. The challenge for the operators is to sign partnership or preferential deals with the largest operators in those countries from which the most visitors originate. Customers are then put onto the network chosen by the home operator and kept there.

For a regulator it may be easier to concentrate on simpler problems than international mobile roaming. A major complication is that the wholesale markets are in foreign countries where the regulator can have little or no influence. Adjustments to its own wholesale market provide no benefits to domestic customers.

Moreover, some southern European regulators have taken the view that the influx of tourists and their roaming revenues is a boost to local operators and not something to be reduced.

Commercial developments

CELTEL, a subsidiary of MTC, announced it had abolished roaming charges in East Africa between Kenya, Tanzania and Uganda in mid-2006. [1] Customers can also top up their stored credit in all three countries in the three currencies. It later abolished roaming charges between all fifteen of its African networks for the use of GPRS.[2]

A significant reason for this move is the small number of customers able to pay the high level of traditional roaming charges and therefore the large numbers who switch SIM cards on crossing the border. In order to avoid the loss of a customer switching to a rival operator, the solution was to deploy a virtual Home Location Register (HLR), keeping customers with the one operator.

This appears to have caused a matching offer from its rivals in East Africa: MTN, Safaricom and Vodacom Tanzania.[3] There have been indications that this offer would soon be extended to Burundi and Rwanda.[4]

Given the heavy volume of travel between Hong Kong SAR and China, a number of solutions to roaming charges have been developed. One option is to change the SIM card, so-called plastic roaming, combined with international call forwarding to the new number.[5] A more sophisticated offer provides customers with one SIM card with two numbers, or even three, for China, Hong Kong and Macau.[6] Again, this relies on the use of an intelligent

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[1] http://www.celtel.com/en/news/press-release41/index.html

[2] From IDG News service "Celtel launches mobile net service in Africa - African leaders hope the service will expand e-commerce" December 11, 2006.

[3] From Reuters "E. African mobile firms scrap cross-border fees" Thu Feb 1, 2007 2:44 PM GMT140

[4] From AllAfrica.com "East Africa: Safaricom, Vodacom, MTN Go EA" February 5, 2007, originally from the *East African Business Week* (Kampala).

[5] See, for example, http://www.peoples.com.hk/p_inter_forward_iso.jsp

[6] See,for example, CSL "Just one card" service
http://www.hkcsl.com/inside/promo_onecard/per_whatisnew_justone_card_eng.htm

network to serve the needs of a large number of customers regularly crossing the borders between these economies.

Hutchison Whampoa, trading as 3, has abolished roaming charges for calls made by its customers on its own networks in: Australia, Austria, Denmark, Hong Kong, Italy, the Republic of Ireland, Sweden and the United Kingdom.[7]

In Europe, under strong pressure from the European Commission (see below), a number of operators have reduced roaming charges or created special tariff plans. These have been criticized as complex. The operators claim that retail prices have fallen by one quarter.[8] However, given the range of roaming charges it is unclear whether this translates to an equivalent fall in the amounts paid by customers.

A large number of Voice over Internet Protocol (VoIP) offers have been developed on the fixed Internet. However, it is taken much longer for these to appear in mobile and nomadic forms. There are a number of Wi-Fi handsets and dual-mode Wi-Fi GSM handsets which allow access to VoIP and these can be expected to grow in the coming years.

Regulatory developments

The 1999 Review of the telecommunications legislation in the European Union saw considerable attention to international mobile roaming and the introduction of a measure intended to resolve the problem. The National Regulatory Authorities (NRAs) were obliged by law to review wholesale roaming markets "as soon as possible" after 23 July 2003. Three years after that date, only Finland and Italy, plus Norway (a member of the European Economic Area, the EEA) completed the task. France abandoned the process after its consultation. Others have since published their short analyses, including Austria, Czech Republic, Slovenia, Spain and Sweden.

No operator has yet been found to have Significant Market Power (SMP) and consequently no remedies can be imposed that might increase competition or reduce prices. There is no reason to expect that any measures will be imposed on operators using this approach which has been shown to be ineffective.

The European Union will adopt a regulation which will become European Union law later in 2007, with no need for transposition by the member states.

Also 3's offer of Macau and Hong Kong on one SIM card http://www.three.com.mo/eng/productsnservices/pagebody_1card2number.jsp

[7] http://www.three.co.uk/news/h3gnews/pressnewsview.omp?collcid=1019745742912&cid=1168359922098&index=3

[8] http://www.gsmworld.com/news/press_2007/press07_10.shtml

It is expected to impose a ceiling or cap on prices within the EU/EEA of 16 cents for incoming, 32 cents for national and 48 cents for international calls. This is based on multipliers of the average charge for mobile termination rates, presently 16 cents, but due to be reduced.

The European Parliament held hearings on roaming in March 2004, May 2006 and in January 2007.[9] It continues to debate the proposed regulation.[10]

The Regulation will also require NRAs to gather data on SMS and data prices, with a view to extending the regulation when it is reviewed after two years of operation.

The European Commission conducted two consultations of stakeholders.[11] It also conducted an extensive survey of public opinion on roaming charges and the use of mobile phones when crossing borders. This gave considerable support for the initiative by the EC.

The EC has competition law cases open against operators in the Federal Republic of Germany and the United Kingdom. These arose from an inquiry opened in mid-1999. No formal conclusion has yet been published by the Competition Directorate-General.

The Arab Regulators Group (AREGNET) has undertaken work on roaming charges within its members.[12] It has taken the matter to the meeting of Arab ICT ministers in June 2006, seeking to reduce wholesale prices and to improve the provision of information to customers about the applicable charges.

Conclusion

International mobile roaming has been an issue for regulatory authorities for nearly a decade, but one on which the progress has been very limited. While there have been some commercial developments that eliminate roaming charges the circumstances appear relatively rare, with the majority of roaming charges seemingly more susceptible to political than to competitive pressures.

[9] Copies of presentations are available at
http://www.europarl.europa.eu/comparl/imco/public_hearings/default_en.htm

[10] The draft report, including an analysis by consultants, from IMCO is available at:
http://www.europarl.europa.eu/comparl/imco/roaming_opinion_en.pdf
Progress of the legislation can be followed at: http://www.europarl.europa.eu/oeil/file.jsp?id=5372302

[11] http://ec.europa.eu/information_society/activities/roaming/roaming_regulation/first_phase/index_en.htm
http://ec.europa.eu/information_society/activities/roaming/roaming_regulation/consultation/index_en.htm

[12] http://www.ntra.gov.eg/presentations/Mobile%20Roaming%20in%20Arab%20countries.ppt

Regulation has proved exceedingly complex with the European Union having taken several attempts, including the use of competition law, to find something that will work. Unfortunately, it is not easily replicated in other regions since they lack the legal powers for trans-national regulation.

Clearly, many countries will have to look for ways to encourage commercial developments to eliminate the problems of high roaming charges.

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