

CALL-BACK, CASH-BACK?

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Call-back brings enormous benefits to telecommunication users in terms of lower prices for international telephone calls, particularly in developing countries. It also provides an important source of revenue, via the accounting rate process, for local Public Telecommunication Operators. So why are developing country governments so opposed to it?

The simplest ideas are usually the most effective. If you talk to your local Public Telecommunication Operator (PTO), they will probably regale you with all sorts of clever tricks with complicated sounding names like "international virtual private networks", or "international simple resale" that promise to reduce your bill for international telephone calls. Most of these options assume that you make an awful lot of international calls. But if you just want to call Auntie Bertha in Boston once a week, then the PTO might insist you pay their full advertised rate, which might be a lot more than Auntie Bertha's PTO charges her. So that's where call-back comes in. You can, of course, call Auntie Bertha and ask her to call you back, or reverse the charges. Telephone users have been doing that since Alexander Graham Bell made his first call. But you might not want to oblige Auntie Bertha to pay for the call. Instead, you could use a public call-back service and get a computer to do the call re-routing for you. That way, you pay a lot less for your call, and Auntie Bertha doesn't need to pay anything.

Call-back is a service which is usually offered in competition to established PTOs and can potentially offer substantial savings. Most US-based call-back services rely on uncompleted call signalling systems. This type of call-back service solicits pre-subscribed customers in a foreign country to dial a US telephone number and, after a certain number of rings, to hang up. The US callback company (or rather, its computer) then initiates a call to the foreign telephone number and when the foreign caller answers, he or she receives a US dial tone from the switch at the reseller's US location. The customer can then place a call in the United States or to a foreign destination. The customer does not pay for the initial uncompleted call, but instead pays the fees charged by the call-back service provider. To call from the United Kingdom to the United States typically costs less than US\$0.25 per minute with a call-back provider compared with BT's peak rate charge of more than US\$0.50 per minute.

While uncompleted call signalling, or code calling, is the most common form of call-back, there are many other types, some of which use leased lines, or "800" freephone numbers, call conferencing or other facilities. A recent ITU expert group on call-back identified some nine different types of call-back, at least two of which were downright fraudulent. These two types, known as call bombardment (or hot polling) and answer suppression interfere with the billing mechanism of the PTO, so they effectively "steal" the service from the PTO. These two types of call-back were banned by the Federal Communications Commission, the US regulator earlier this year and the ITU Council at its meeting in June 1996 called upon ITU members to suspend the activities of call-back companies which use these specific two methods. But, by implication, most other forms of call-back are legitimate, and the ITU Council recognised this by stating that "call-back ... many be attractive for users".

The ITU had been under pressure from some countries to ban call-back altogether, by declaring that it infringes the International Telecommunication Regulations, an international treaty signed in 1988. On the contrary, the Council pointed out that one of the purposes of the ITU is the "offering of services at lowest cost", a purpose which call-back helps to fulfil. The Council reaffirmed that it is the "sovereign right of each country to regulate its telecommunications and as such it may permit, prohibit or otherwise regulate call-back in its territory". To date (up to 10 June 1996), some 26 countries¹ had made statements concerning its legality in their territory, mostly to say that it is not legal. In all of these countries, the main national PTO has a monopoly over the provision of international telecommunication services and perhaps this is the key to understanding their objections: call-back is an infringement of their monopoly. There is a certain irony to this in that it is the PTOs themselves that are the main users of alternative calling procedures which change the routing of the call, for instance through calling card and country direct services. But the development of call-back has introduced new players into the market in direct competition with the PTOs.

It is difficult to detect call-back from simple examination of the bilateral traffic statistics because it appears as an incoming call (or two outgoing calls in the case of traffic to third countries) from the host country (usually the United States) rather than an outgoing call from the origin country. Industry estimates show that there were perhaps 600 million minutes of call-back traffic in 1995, equivalent to some 1 per cent of total telephone traffic, or some 4 per cent of US international outgoing traffic. If one assumes that the average price of a call-back call is around US\$0.30 per

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minute, that means call-back is a US\$0.45 per minute (or about half the cost of an average international call routed through a traditional PTO), the call-back is a US\$270 million business worldwide.

While the actual volume of call-back traffic may not yet be that significant, the growth rate certainly is. Call-back traffic has increased at least tenfold since 1993. It is difficult to determine whether call-back is likely to be a long-term or a short term phenomenon. It thrives because of imbalances in the cost of international calls between countries and also because of the gap between the cost of providing telephone service (approximated by the accounting rate) and the price charged to consumers (the collection charge). This gap is arguably widening over time, which suggests that call-back will be with us for some time to come. While PTOs might not think so, the overall effect of call-back has been positive, particularly for end-users (see Table). For developing countries, the effect of call-back is more difficult to determine, but even here the overall effects appear to be positive, especially when compared with other “alternative calling procedures” which by-pass the accounting rate system (see Box)

Table: Arguments for and against call-back

| <i>In favour of call-back</i> | <i>Against call-back</i> |
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| <p>Call-back and other “alternative calling procedures” have done much bring about price reductions in international call charges to individual users, to close the differential between the price of international calls and national long distance, and to bring tariff structures closer to the real cost of providing the service. By contrast, PTO alternatives such as country-direct are invariably more expensive than using the local PTO and rarely offer off-peak discounts.</p> | <p>A few call-back operators have proved to be fly-by-night operators who trade under a particular name only long enough to collect subscription fees and then move on or change their name. Some call-back operators are slow in paying debts to PTOs. Occasionally call-back operators advertise services which they are not able to deliver, sometimes because access has been cut off by a hostile PTO. The more established call-back operators would welcome some form of licensing.</p> |
| <p>In countries which do not permit infrastructure competition in international service or which place restrictions on market entry, call-back provides an important source of competition to established PTOs with all the benefits which that brings, such as increased choice, lower prices, better customer service, improved efficiency and improved marketing of services.</p> | <p>It is sometimes claimed that call-back operators make little investment in new network capacity in contrast to the PTOs which use revenues to build, modernise and extend networks. However, in most countries call-back operators would not be <i>allowed</i> to construct infrastructure even if they wanted to. Where infrastructure competition is allowed, call-back operators do invest, by buying their own switches and leasing lines.</p> |
| <p>The companies that provide call-back services are typically small and medium-sized enterprises, many of which are new start-ups. The telecommunications sector has undoubtedly benefited from the entrepreneurship and service innovation that these companies have brought to the market. Call-back also permits calls between countries than have no direct traffic links (e.g., Israel and several Arab States).</p> | <p>The practice of call-back diverts revenues from developing country PTOs because they offer services at a lower price. Consequently those PTOs have less money to invest. However, the developing county PTOs do benefit indirectly through settlement payments from partner countries. Furthermore, there is little evidence that developing country PTOs are seeing reduced profits.</p> |
| <p>The provision of call-back brings benefits primarily to residential consumers, especially to immigrants, refugees, and foreign students who are often among the poorest members of society. By contrast, PTO offerings such as International Virtual Private Networks (IVPNs) tend to benefit mainly business subscribers while calling cards are intended mainly for rich tourists. Call-back is much less vulnerable to fraudulent use than calling cards.</p> | <p>Some call-back operators are guilty of false or misleading advertising because they just quote the discounts compared with fictional PTO tariffs rather than the real price. However it is the PTOs themselves which are the worst offenders, notably with their country-direct and calling card services which are invariably more expensive than local tariffs.</p> |
| <p>There is growing evidence to suggest that call-back is generating extra traffic, by persuading users to make additional calls, or longer calls, than they would do on other more expensive services. In 1994, call-back added perhaps an extra 1.5 per cent to the growth rate of US outbound traffic and in 1995 at least twice that.</p> | <p>It is sometimes argued that call-back adversely affects network quality because of the use of uncompleted signalling. Some forms of call-back may be harmful, such as call bombardment, but the majority of call-back operations do not impair network quality. Indeed, where call-back is used in conjunction with international simple resale (ISR), it may actually improve network quality because the traffic travels over leased lines, thereby relieving congestion in the main network</p> |
| <p>The development of call-back has exerted considerable pressure for a reform of the international accounting rate system, which is long overdue.</p> | <p>Most call-back operators come from one country (the United States) and their profits may be repatriated. However this is only because other countries have been slow to license call-back service providers.</p> |

Box: Call-back: a boost for development?

It is often alleged that call-back is a problem for developing countries because it deprives the local Public Telecommunication Operator (PTO) of revenue from international telecommunication services which it needs to develop the national telecommunication network. While it may lead to a reduced revenue for the national monopoly PTO, it does not necessarily lead to a loss of revenue to the developing country as a whole.

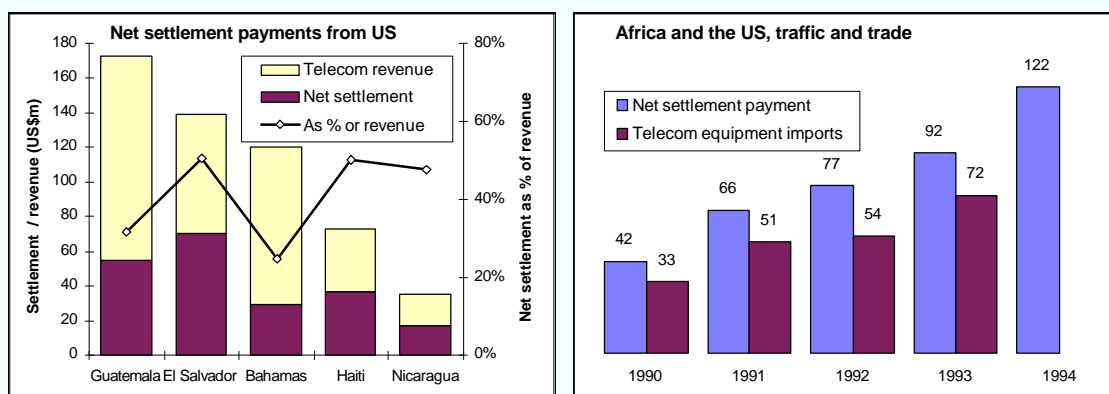
Consider the following case where a resident of a developing country spends US\$ 10 on making a call direct via a national PTO (at say US\$ 2.00 per minute: a 5 minute call) and the same amount with a call-back company (at say US\$ 1.33 per minute: a 7.5 minute call). If the accounting rate with the distant country is US\$1.20 per minute, then the settlement payment is US\$0.60 per minute. In the first case, the settlement payments out of the country are US\$3.00 (5 minutes multiplied by 60 cents) and the profit retained by the PTO is US\$ 7.00. In the second case, the settlement payments into the country are US\$ 4.50 (7.5 minutes multiplied by 60 cents). The call-back service provider will have billed US\$ 10.00 from the customer and will have paid a wholesale carrier in a distant country perhaps US\$ 5.00 for carrying the call (margins offered by wholesale carriers are typically very close to the accounting rate). Thus the profits retained by call-back provider are US\$ 5.00. Assuming that the call-back provider spends around one half of its revenue in the origin country (for marketing, billing and providing the service etc) and the other half in the distant country (to pay for the computer server, as well as retained profit), then the total money remaining within the origin country is US\$ 7.00, or exactly the same as in the first case. In the first case, a share of the money retained by the PTO (US\$ 7.00) will have gone towards paying for initiating and billing the call. The only difference is that in the call-back case the user was able to make 50 per cent more calls.

While the PTO of the developing country may seem to be losing out (it retains only US\$ 4.50 instead of US\$ 7.00) in practice it may have gained because it is not obliged to pay out any cash to the distant PTO, and because the cash it receives will be in the form of hard currency, usually US dollars. Furthermore, in the second case, there are no costs incurred for the local PTO in billing for the service or in debt collection (that would be done by the call-back provider). In statistical terms, a call-back call looks like a call which originates from the distant country. The evidence that call-back is taking place should show up in the settlement payments, not in the traffic data. For many developing countries, settlement payments are now a major form of telecommunication revenue. As shown below, in several countries of Latin America and the Caribbean, net settlement payments from just one country, the United States, already make up more than half of overall telecommunications revenue. In Africa too, where call-back is popular due to the high price of international calls, net settlement payments from the United States have tripled in value in just five years. A high percentage of this windfall has been poured back into network development, as the trade figures show.

Of all the different “alternative calling procedures”, call-back is certainly the most suited to the needs of developing countries. Some alternative calling procedures stimulate traffic without bringing financial benefits to the local PTO (this is the case, for instance, with Internet telephony, international simple resale and other PSTN-bypass systems). Others bring financial benefits to the local PTO (via the settlement payment mechanism) but do not necessarily stimulate traffic by offering lower prices (for instance, calling card traffic, country-direct services). Only call-back performs the trick of both stimulating traffic and raising cash for the local PTO. Better still, it is particularly aimed at residential consumers rather than the business users that are the usual beneficiaries of discounted tariffs.

Figure 1: Call-back, cash-back

Net Settlement payments between the United States and selected Caribbean countries, 1994, and African countries, 1990-94



Source: ITU World Telecommunication Indicators Database, FCC, US Dept. of Commerce.

Notes

¹The following countries have made statements, published in the ITU Operational Bulletin, concerning the legality of call-back in their territories: Algeria, Bahrain, Burundi, China, Columbia, Djibouti, Ecuador, Egypt, Honduras, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Latvia, Malaysia, Morocco, Niger, Portugal, Qatar, Thailand, Turkey, Uganda, Viet Nam, Yemen.