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SPECIAL REPORT

Dialing for Pennies

Upstart telecoms are outwitting the old national cartels. The result: a surge in competition worldwide--and even free international calls

Howard Jonas, the CEO of telecommunications company IDT Corp. (IDTC), still remembers the day in 1993 when a colleague from Saudi Arabia called to say that Saudi troops were at the door. "Don't let 'em in," Jonas told the panicking man. The soldiers broke down the door anyway and grabbed IDT's telephone equipment, shutting down its local operations. The Hackensack (N.J.)-based company had been running a service for six months that let Saudis call abroad for far less than official rates--a move that took cash out of the coffers of the national phone monopoly. A few weeks later, Jonas got some of his equipment back and was able to start operating again. But the incident put him on notice: The world's telephone monopolies would do just about anything to protect their cash cows.

Such are the stakes in the $60 billion business of international phone calls. For decades, carrying phone calls across national borders has been dominated by monopolies that fiercely guard their right to charge sky-high prices and rack up huge profits. You want to call Russia from the U.S.? In 1996, you coughed up $1.75 a minute. Pakistan? It was $3 a minute, one of the highest rates in the world. Everybody cleaned up--from AT&T (T) and British Telecommunications PLC (BTY) to India's Videsh Sanchar Nigam and Senegal's Sonatel. Everybody except customers, of course.

Now, the century-old rules of the international phone cartel are collapsing. Spurred by more efficient technology, deregulation, and a dizzying wave of startup activity, the nosebleed prices of the past are disappearing fast. Today when MCI WorldCom Inc. (WCOM) sends your call into Germany, it doesn't have to go to Deutsche Telekom (DT) to make the connection. Instead, it can choose from among 100 other companies, all trying to get the business by offering ever-lower prices. And with phone gear getting more efficient--and far cheaper--upstarts can suddenly afford to operate private networks that go head-to-head with the monopolies. Tiny Bermuda-based RSL Communications Ltd. (RSLC), for instance,

runs private telephone lines into countries around the globe to avoid paying the lavish fees those countries levy on public lines.

The result: Prices for international calls are falling toward their actual costs from the heights long dictated by fat and happy monopolies. In just the past three years, the average cost of an international call from the U.S. has dropped 25%, from 74 cents a minute to 55 cents. In some parts of the world, fees already have plunged as much as 80%. A call from the U.S. to Britain, for example, runs 12 cents a minute, vs. 58 cents in 1996. And experts expect to see much deeper declines in the next three to five years. "Technology and competition are tearing down the old wall of monopoly, and it's happening faster than most people predicted," says William E. Kennard, chairman of the Federal Communications Commission in Washington.

NET PROGRESS. Now, even the fallen bricks could be swept away, thanks to the Internet. Free phone calls over the Net are possible today as long as they are being placed from a PC on one end to a PC on the other. Yet Net telephony remains just a tiny sliver of international traffic, mainly because the quality hasn't been up to snuff and the populace in many countries has limited Net access. That's changing. As quality improves and the Net becomes more widely available, it will offer consumers a cheap alternative to existing phone service. More importantly, telecoms are tapping into this communications backbone by routing their calls over the Net. The combined effect will drive down prices even more. "The Internet and other things are dooming the whole machine," says Bertil Thorngren, adjunct professor at the Stockholm School of Economics and consultant to Swedish phone company Telia.

Indeed, as the entire international telephone system is revamped, dramatic change lies ahead. Countries that once protected their telephone monopolies with everything from strong-arm regulatory policies to armed forces will find that their cherished assets lack the scale to survive on their own. Expect more cross-border mergers like the proposed alliance between Sweden's Telia and Norway's Telenor. Even AT&T's alliance with British Telecom could foreshadow a merger of the two in the future. "When the system breaks, it'll become a free market," says Ameet Shah, a partner at Andersen Consulting. Then "those with the most volume will be able to turn that into a genuine competitive advantage."

They'll have to rely on more than just volume, though. Phone minutes are fast becoming low-margin commodities--and some experts believe voice calls could actually become free. As that happens, carriers around the globe will scramble for profits by offering whizzy new features like talking e-mail or "follow-me" services that let customers receive calls anywhere in the world on a single phone number. The combination of lower prices and fat-margin services should add up to big growth: By 2008, predicts telecom researcher Ovum Ltd. in London, the combo could double the volume of international calls to nearly 200 billion minutes a year.

How were such powerful international forces as monopolies and governments so quickly undermined? Credit deregulation--and, ironically, U.S. regulators. One of the most radical changes to hit the telecom industry came from the FCC in August, 1997. The commission--without negotiating with any other countries--decided to slash the so-called "settlement" fees that U.S. carriers pay foreign companies to complete calls from the U.S. These fees had been set under an international settlement system to compensate countries for handling each other's traffic--and for any imbalance in the volume. For instance, in 1997 U.S. customers spent 495 million minutes on calls to Brazil, but Brazilians made only 159 million minutes' worth of calls to the U.S. To pay for the deficit of 336 million minutes, U.S. carriers sent Brazil a cool $154.7 million.

CUT-RATE TO KABUL. While some of the rates in the FCC's so-called Benchmarks Order took effect on Jan. 1 and others go into effect as late as 2002, the reductions already are having a big impact. Settlement fees often made up half the price of international calls, and the FCC's benchmarks are, in extreme cases, less than one-tenth of what foreign phone companies used to receive. For example, the $2.83 per minute American phone companies now pay to send calls into Afghanistan will be cut to 23 cents in 2002.

Other countries were incensed at the FCC's decision. That's partly because its maverick move was the opposite of how things used to be done. For the past 134 years, since the era of telegraphs, countries have held painstaking bilateral negotiations to set what they pay for accepting incoming communications. After the FCC's move, a consortium of Latin American countries filed suit in the

U.S. against the FCC, arguing that it was dictating public policy to other countries. Countries also are turning to the International Telecommunication Union, the Geneva-based body responsible for the settlement rate system, hoping it can negotiate a new multilateral approach. So far, the FCC has won every dispute.

The real reason for all the vitriol is money, of course. Lots of money. Because industrialized countries tend to initiate more calls than they receive, the settlement system resulted in a net transfer of billions of dollars from wealthier to poorer nations. Since 1985, U.S. carriers have paid out some $43 billion in settlement fees, including $1.2 billion to China, $1.3 billion to India, and a stunning $7.6 billion to Mexico, according to FCC figures. Now, for the first time, these payments are steadily declining. Payments by U.S. carriers reached a peak of $5.8 billion in 1996 and dropped to an estimated $4.4 billion in 1998. U.S. payments likely will drop below $4 billion this year.

That has put a squeeze on some developing countries. For many, telephone fees are the most- or second-most-important source of hard currency. In 1995, for example, settlement fees accounted for 100% of the foreign currency Cameroon received. And they've been a key means for countries to subsidize the construction and operation of their phone networks (page 108). India's international phone monopoly, VSNL, gets 37% of its $1.6 billion in revenues from settlements. Because of the decline in such fees, Sri Lanka Telecom Ltd. has had to double the price of a three-minute local phone call. The loss of revenues could crimp economic development, too: For every phone line added in a poor country, its gross domestic product rises by $2,000, according to a 1997 study by consulting firm McKinsey & Co.

Not that all that cash was invested wisely. Though settlements were meant to subsidize phone service and telecom construction, the money was often siphoned off to pay for postal services or unrelated infrastructure projects. Indeed, some places that received the largest subsidies have done the least to upgrade their phone systems. "You can see that the money isn't always well spent in some countries," says James H. Alleman, a professor of telecommunications economics at the University of Colorado at Boulder. "Sometimes I think they're putting it in Swiss bank accounts or using it to buy Mercedes for government officials."

CALLBACK COUP. The real change goes far beyond cutting settlement payments. As competition emerges in countries around the world, the whole notion of a formal settlement fee is becoming obsolete. What's emerging instead is a vibrant free market where dozens of competing companies negotiate directly with one another to link their phone systems, sometimes at no charge. Thanks to deregulation, 38% of international phone traffic now is completed for less than the benchmarks required by the FCC. "When you have competition on both ends of the line, rates come down to the public," says Seth Blumenfeld, president of international services for MCI WorldCom. The cost of completing a call "is rapidly approaching the actual cost of providing the service."

To understand why the old international phone system is headed for extinction, rewind to the early 1990s, when the seeds of the revolution were sown. That's when opportunistic newcomers like IDT and Telegroup Inc. started offering inexpensive "callback" services to customers outside the U.S. Callback took advantage of the fact that, because of competition in the U.S., it was far cheaper to call abroad from the U.S. than the other way around. The mechanism was dead simple: When John Smith in Tokyo wanted to make a call to New York, he dialed a dedicated number in the U.S., waited a ring or two, and hung up. A computer would then call back, and Smith would hear a U.S. dial tone on the line. Then he could call anywhere in the world and pay U.S. prices. That could have been 36 cents per minute, vs. Japanese rates up to 10 times higher.

There was a catch: The gimmick was illegal in most places. Still, it was nearly impossible to stop--short of sending out the troops. And its impact was enormous. In a flash, hundreds of thousands of customers all over the world got a taste for lower prices. "Once it was created, the balance shifted," says Peter Williamson, CEO of U.S. operations for Australia's Telstra Corp. (TLS) Simultaneously, because callback boosted the ratio of outbound to inbound call volume in the U.S., it had a sharp impact on the U.S. settlement rate deficit. From 1993, when callback flowered, to its peak in 1996, net payments from U.S. carriers jumped by nearly $2 billion. That prompted regulators in the U.S. to push for lower settlement fees.

At the same time, countries figured out another way to jimmy the system. By lowering their own settlement rates, countries could entice carriers to route traffic through them on the way elsewhere. In 1996, Britain did just that, slashing rates in half to just 17 cents a minute. That way, instead of paying 48 cents from the U.S. to Poland, a carrier could send the call to Britain for 17 cents where it would be forwarded to Poland for an additional 26 cents cents. This scheme, known as "refile," violates international law, but it has spread to regions with high settlement rates. "We're seeing the same thing that happened in Europe happen in Asia," says Ken Stanley, an economist for the FCC.

RESALE REVOLT. The real shakeup, though, is happening right now. For decades, multinationals such as IBM (IBM) and Ford Motor Co. (F), with operations spread all over the world, have set up private global phone and data networks for their own use. Calls traversing these private lines into places such as Sweden or Britain aren't subject to settlement rates. A small amount of traffic from such private lines has always leaked out into the public network--say, if a Microsoft Corp. executive called a colleague in Hong Kong and then the call was transferred to someone else in the city. But formal connections between private lines and the public network were illegal in most countries.

Until last year, that is. The path was blazed by a startup based in Rochester, N.Y., called ACC Corp., now part of AT&T. Back in 1994, the company pioneered a so-called "simple resale" agreement with Britain that let it sell excess capacity on its leased lines to British phone companies. That led to a steep reduction in prices that convinced other countries such as Japan and Korea to authorize similar resale deals last year. As companies from RSL to MCI WorldCom have jumped into the market, the impact on prices has been instantaneous. In Hong Kong, per-minute costs for telephone time have fallen by a factor of 10 since it started resale in January, 1998. "Resale forces rates to be based on costs instead of political concerns," says Michael J. Scheele, president of San Francisco telecom consultancy M.J. Scheele & Associates. "It takes the fat out of the system." Some countries are resisting the trend: China, Mexico, and Israel, for instance, don't yet allow resale.

Even closed markets, though, can't stop another scheme now just beginning: phone calls made over the Internet. From its roots in

1993 as a quick-and-dirty way to talk for free from one PC to another, Internet telephony is growing into an inexpensive alternative to traditional calling. Now, by using gateways that connect conventional phone systems to the Net, carriers can send calls from any phone to another--using the Net as the link across continents or oceans. Bear, Stearns & Co. analyst Robert Fagin estimates that 1.2 billion minutes of international voice traffic will be sent over the Net in 1999, or slightly more than 1% of the total. As quality improves, that could climb to nearly 7% of the market in 2002, or 10 billion minutes, turning Net telephony into a $968 million business.

The leader of the pack in Internet telephony today is startup Net2Phone (NTOP). The former subsidiary of IDT charges 42% less than AT&T, on average, to make international calls: A minute to France costs customers just 9 cents, vs. 22 cents for AT&T. Others in the field include deltathree.com, a subsidiary of RSL Communications, and iBasis Inc., a Burlington (Mass.) startup. "It's amazing to see the biggest companies in the world brought to their knees by little American entrepreneurs," says analyst Judy Reed Smith of the research firm Atlantic-ACM.

Where does all of this leave the international telephone system? The glory days are over. The settlement process that for decades subsidized the construction of phone networks around the world is doomed. The advance of technology means that it will be impossible for countries to prop up fees and squeeze strangers in a strange land. Whatever the new system looks like, the fees for completing phone calls across borders inevitably are heading down toward their actual cost.

That means the balance of power between the world's telephone monopolies and their customers is finally shifting. Ever since AT&T sent its first telephone call from the U.S. to London in 1925, international consumers and businesses have been held hostage by phone companies that could virtually dictate whatever price they choose. Not anymore.

By Andy Reinhardt in New York, with Irene Kunii in Tokyo, Bruce Einhorn in Hong Kong, and Elizabeth Malkin in Mexico City

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