Every single day, countless terabytes of information are transmitted across voice and data networks worldwide. The vast majority of that data concerns business meetings, banking transactions, basketball scores, graduation pictures, and other such vital and not-so-vital information. However, sprinkled here and there are bits of information about terror, murder, fraud, and extortion: Bits of information about crime. Serious crime.

What tools to law enforcement bodies have at their collective disposal to handle such situations? How can potentially dangerous information be monitored and controlled? The best people to turn to for answers to such questions are probably the professionals who handle the monitoring, collection, and control of data every day: the OSS industry. They are the best resource for implementing a meaningful and comprehensive Lawful Intercept program.

Let's be clear, however, about what it is we are talking about. Lawful intercept (LI) is wiretapping. In order to have a discussion about the implementation of LI, however, we have to put aside issues of legality. The warrantless wiretapping that has been all over the news in the States is not really relevant, though it's difficult to convince many of that point. United States Attorney General Alberto Gonzales wrote a letter in January of this year to Senators Leahy and Specter of the Judiciary Committee ensuring them that, as the court had caught up with the needs of the fight against terrorism, wiretapping without judicial permission is no longer necessary. The letter admitted no wrongdoing for the previous warrantless wiretaps, however. Instead, it made statements like “Although... the Terrorist Surveillance Program fully complies with the law, the orders the Government has obtained will allow the necessary speed and agility while providing substantial advantages.” As a result, the opponents of the previous program consider the letter, as well as other moves made by the administration and Gonzales alike, to be cryptic and unapologetic.

Still, regardless of how such correspondence would be or should be received, warrantless wiretapping is irrelevant. LI is, by virtue of its name, lawful. It is the process by which communications, whether circuit or packet-based, are monitored for illegal activity, subject to judicial or administrative approval and oversight.
In the days of the PSTN, wiretapping was a relatively straight-forward process. The physical line connecting one party to another could be tapped, providing all the insight one could need into the calls being made and the legality or illegality of the issues being discussed. However, VoIP and mobile users greatly complicate the situation by removing the handy feature of a physical line between the two parties.

There are laws that have been passed and are in the process of being enacted worldwide to deal with this issue. In the US, the law is the Communications Assistance for Law Enforcement Agencies Act (CALEA) of 1994. In Russia and the other members of the Commonwealth of Independent States, the law is known as SORM (Sistema Operativno-Rozysknykh Meropriyatii, literally "System of Ensuring Investigative Activity"). Likewise, there is the Regulation of Investigatory Powers Act (RIPA) of 2000 in the UK, the Telecommunicatiwet of 1998 in the Netherlands, and Section 88 of Germany's Telekommunikationsgesetz. These laws vary in scope and detail, but essentially all provide for the same thing: access.

The deadline for the implementation of the US law, CALEA, is fast approaching. In 2004, the US Department of Justice, along with the FBI and DEA, filed the “Joint Petition for Expedited Rulemaking”. In this document, they pushed for the acceleration of CALEA compliance. This expanded CALEA to cover communications made over IP networks. Based on these recommendations, the FCC enacted a push to ensure that CALEA applies to facilities-based broadband providers and interconnected VoIP providers. By May 14, 2007, all SPs in the US must have a plan for CALEA in place. The SPs must eat the cost of implementation, and can't charge a national surcharge to do so.

The requirements for LI for the SPs are several: The SPs must have mechanisms in place to turn on monitor communications and “turn on” LI capability when appropriate. They must also have a means to monitor communications and deliver their findings to law enforcement bodies.

One option for this process is to install hardware for all of these functions. This is costly (and, according to the law, can't be subsidized by subscribers through a direct surcharge). The mediation devices alone are an expense, and one often overlooked by many who aren't directly affected by the rigors of CALEA. However,
vendors like SS8 and Verint are likely enjoying the added business that such a requirement brings them, as each unit tends to run around $100,000.

Alternatively, SPs can use the services of a Trusted Third Party (TTP) to maintain the hardware and other aspects of LI capability. Vendors such as NeuStar, VeriSign, AcmePacket and the other vendors featured in this very issue of Pipeline can handle the monitoring and mediation at a fraction of the cost. Furthermore, TTPs are generally companies with long histories of monitoring networks for accuracy, speed, and clarity. To extend a similar high level and drill-down capabilities to LI seems like a natural move.

The TTP model is not without its drawbacks. Critics of CALEA maintain that allowing private companies to capture and analyze data is inappropriate, and an example of worrisome privatization of a function traditionally performed by the government itself. There is also the omnipresent concern that everyone who rents rather than owns faces: Where does my money go? Am I making an investment, or just throwing my money down a bottomless pit?

Either way, the necessities of CALEA and other LI measures are fast approaching, so the smart company is spending its time figuring out how to make it all work as soon as possible. While LI implementation is no 'magic bullet' against illegal activity, it's yet another measure meant to ensure that crime is difficult and costly. That's an important goal, even if it means that fighting crime is just as difficult and (wince) just as costly.

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