Cellular Tower Location Information

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Every cellular phone that is turned on is constantly "checking in" with nearby cellular towers. Law enforcement often wants to obtain information about a particular phone's contacts with cellular towers. For example, an officer may want to obtain information about the phone belonging to a murder suspect; if that phone was in contact with a cellular tower near the scene of the murder, at the time of the murder, that tends to place the suspect at the scene.

Cellular service providers generally retain information about phones' contacts with towers, including which tower(s) each phone contacted during any given check-in, and which "face" of the tower(s) the phone contacted. (This information used to be important for determining roaming charges; it may be less important now, but companies still collect it.) Depending on exactly what information is available, an officer may be able to place the phone in a general area, or even, if the phone contacted multiple towers simultaneously, to triangulate the phone's location to a relatively particular spot.[1]

Sometimes law enforcement wants to obtain historical data only, sometimes it wants to obtain prospective data only – to enable the real-time tracking of a suspect – and sometimes it wants both. The question is, how may law enforcement obtain such data, and what does law enforcement need to show in order to be entitled to it? The answer depends mainly on federal statutory law, as there are no state statutes on point and the information at issue is likely not protected by the Fourth Amendment. Cf. Smith v. Maryland, 442 U.S. 735 (1979) (no expectation of privacy in telephone numbers dialed, because the numbers are conveyed voluntarily to the phone company).

Historical Data. Law enforcement usually seeks historical tower information under the Stored Communications Act, 18 U.S.C. § 2701 et seq. The SCA generally prohibits providers of "electronic communications services" and "remote computing services" from disclosing subscribers' records or other information absent appropriate legal authority. 18 U.S.C. § 2702(a)(3). Typically, cellular service providers are "electronic communications services" under the SCA, and so are prohibited from providing subscriber information to law enforcement absent appropriate legal process.

What legal process is necessary? Under 18 U.S.C. § 2703(c)(1), law enforcement may obtain a "record or other information pertaining to a subscriber to or customer of such service (not including the contents of communications)" by obtaining a search warrant or by obtaining a court order.[2] Law enforcement

[1] The government represented in a recent case that "the historical [tower information] that it sought . . . does not provide information about the location of the caller closer than several hundred feet." In the Matter of the Application of the United States, __ F.3d __ , 2010 WL 3465170 (3d Cir. Sept. 7, 2010).

[2] Under 18 U.S.C. § 2703(c)(2), law enforcement may obtain certain basic subscriber information with a trial, grand jury, or administrative subpoena. The available information includes "local and long distance telephone connection records, or records of session times and durations." I don't know of a case addressing whether tower information

officers may prefer to seek a court order, because the standard for issuance is lower. To obtain a court order, the applicant need only present "specific and articulable facts showing that there are reasonable grounds to believe that the . . . records or other information sought, are relevant and material to an ongoing criminal investigation." 18 U.S.C. § 2703(d).

Courts have generally held that a court order under the SCA provides a sufficient basis for obtaining historical cellular tower location information. Patrick T. Chamberlain, Note, Court Ordered Disclosure of Historical Cell Site Location Information, 66 Wash. & Lee L. Rev. 1745, 1748 (2009) (stating that "almost all" courts to have addressed the issue have found an SCA court order sufficient to obtain tower information); In the Matter of the Application of the United States, __ F.3d __ , 2010 WL 3465170 (3d Cir. Sept. 7, 2010) ("In sum, we hold that CSLI . . . is obtainable under a § 2703(d) order."); In re Applications of United States, 509 F. Supp. 2d 76 (D. Mass. 2007).[3]

Prospective Data. In federal investigations, prospective, or real time, tower information can be obtained using a tracking device search warrant under Fed. R. Crim. P. 41. Although there is no analogous rule or statutory provision under state law, presumably a state court order issued upon a showing of probable cause would also suffice. The legal dispute about prospective data has focused on whether there is any lesser form of process that can be used.

One type of lesser process that is not sufficient is a court order under the SCA. Most courts have held that prospective tower information is not the type of "record or other information pertaining to a subscriber" contemplated by the SCA. As these courts have observed, the SCA provides for access to "stored rather than prospective information." In re Application of United States for Order, 497 F.Supp.2d 301 (D. Puerto Rico 2007). Furthermore, the SCA lacks the safeguards typical of statutes that authorize prospective surveillance, such as time limits on orders and reporting requirements, which suggests that Congress did not intend the SCA to be used to obtain prospective data. Id. Finally, many courts have held that obtaining prospective information would, in effect, turn a cellular phone into a tracking device, and thus would remove it from the ambit of the SCA. Id.; In re Applications of United States, supra (collecting cases).

Law enforcement sometimes asserts that it can obtain prospective tower information using a court order issued under the pen register statutes, 18 U.S.C. § 3121 et seq. These statutes govern the use of pen registers (which record information related to the dialing of outgoing calls) and trap and trace devices (which record similar information related to incoming calls). Court orders authorizing the use of pen

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falls within this provision; it appears that law enforcement typically obtains a court order when seeking such information.

[3] Though reasonably well-settled, the issue isn't completely free from controversy, as indicated by the history of In the Matter of the Application of the United States, __ F.3d __ , 2010 WL 3465170 (3d Cir. Sept. 7, 2010). A federal magistrate judge in that case held that historical tower information was not available with an SCA court order, arguing that cell phones function as tracking devices, and that information from tracking devices falls outside the scope of the SCA. See also id. at n.6 (collecting cases, include one other case apparently adopting that argument).

registers and trap and trace devices are easy to obtain,[4] which makes this procedure appealing to law enforcement.

The argument that the pen register statutes can be used to obtain tower information comes from the statutory definitions of "pen register" and "trap and trace device" in 18 U.S.C. § 3127. Each is defined as a device that captures, either for outgoing or incoming calls, "dialing, routing, addressing, or signaling information." On its face, cellular tower location information appears to be "routing . . . or signaling information." However, 47 U.S.C. § 1002 specifically excludes cellular tower location information from the reach of the pen register statutes. That section is part of the Communications Assistance for Law Enforcement Act of 1994, 47 U.S.C. § 1001 et seq., which requires telecommunications service providers to equip themselves to provide law enforcement with the information to which law enforcement is entitled under the various electronic surveillance statutes. Section 1002 states, "with regard to information acquired solely pursuant to the authority for pen registers and trap and trace devices . . . call-identifying information shall not include any information that may disclose the physical location of the subscriber (except to the extent that the location may be determined from the telephone number)." Therefore, an order under the pen register statute cannot require the disclosure of cellular tower location information.

Note that 47 U.S.C. § 1002 refers to "information acquired solely pursuant to the authority for pen registers and trap and trace devices." (Emphasis supplied.) Seizing on the word "solely," some prosecutors and law enforcement officers have argued that they may combine the authority of the pen register statutes with the authority of the SCA to obtain prospective cellular tower information. The idea is that the pen register statutes provide the safeguards – such as time limits on orders and the like – that are missing from the SCA, while the SCA provides an additional basis for obtaining the information and therefore provides a way around the restriction in 47 U.S.C. § 1002.[5] Although there is a split of authority regarding this theory, it appears that a majority of courts have rejected it; if, as argued above, the SCA does not provide a basis for obtaining prospective cellular tower location information, then it adds nothing to the mix and does not provide a way around 47 U.S.C. § 1002.[6]

Summary. Historical tower information probably can be obtained by an SCA court order. Prospective tower information probably can be obtained only using a tracking device search warrant or equivalent state process.

[4] A federal prosecutor can approach a federal judge, or a state law enforcement officer can approach a state judge, and submit a sworn application stating that "the information likely to be obtained is relevant to an ongoing criminal investigation." The court doesn't make an independent determination of likely relevance. Instead, upon a proper certification, it must issue an order authorizing the use of a pen register and/or a trap and trace device, for a period of up to 60 days. The order is ex parte and must be sealed.

[5] A more detailed recitation of the hybrid theory appears in Chamberlain, supra, at 1768-75.

[6] See Chamberlain, supra, at 1769 ("[T]he government has had very little success . . . by way of its hybrid theory argument."); In the Matter of the Application of the United States, __ F.3d __, __ n.6 (3d Cir. 2010) (collecting cases on the hybrid theory); In the Matter of the Application of the United States, __F.Supp.2d __, 2010 WL 3021950 (W.D.Tex. July 29, 2010) (collecting cases and finding a "strong majority" rejecting the hybrid theory); In re Application of the United States for an Order Relating to Target Phone 2, __ F.Supp.2d __, 2009 WL 6767391 (N.D. Ill. May 21, 2009) (similar).