In the

United States Court of Appeals For the Seventh Circuit

Nos. 12-2925 and 12-2981

ADT SECURITY SERVICES, INC. et al.,

Plaintiffs-Appellees,

v.

LISLE-WOODRIDGE FIRE PROTECTION DISTRICT and CHICAGO METROPOLITAN FIRE PREVENTION COMPANY,

Defendants-Appellants,

and

DUPAGE PUBLIC SAFETY COMMUNICATIONS,

Intervening-Appellant.

Appeals from the United States District Court for the Northern District of Illinois, Eastern Division. No. 10 CV 04382—**Milton I. Shadur**, *Judge*.

Argued April 22, 2013—Decided July 31, 2013

Before WOOD, TINDER, and HAMILTON, Circuit Judges.

HAMILTON, *Circuit Judge*. In this case we revisit factual and legal issues concerning the Illinois law establishing

fire protection districts and one district's effort to shut down the private market in fire alarm monitoring services by substituting for it a less safe and less reliable system operated by just one chosen vendor.

In 2009 the Lisle-Woodridge Fire Protection District passed an ordinance under which it took over fire alarm monitoring for all commercial properties in the District. The private alarm companies that had previously provided those services in the District sued, alleging that the ordinance interfered with their business, created an illegal monopoly for the District, violated their constitutional rights, and exceeded the District's statutory powers. In an earlier appeal from the district court's first order permanently enjoining the District from implementing the ordinance and granting summary judgment for the alarm companies, we affirmed in part, reversed in part, and remanded, finding on review of summary judgment that the District had the authority to enforce parts of the 2009 ordinance. We remanded for the district court to revise its permanent injunction. ADT Security Svcs., Inc. v. Lisle-Woodridge Fire Protection District, 672 F.3d 492 (7th Cir. 2012).

On remand the district court held a four-day evidentiary hearing. The district court issued a modified permanent injunction that was based on new factual findings that are more detailed and differ somewhat from the limited summary judgment record upon which we based our 2012 decision. The District now appeals from the revised permanent injunction order with a long list of objections, but it argues primarily that the revised permanent injunction conflicts with our 2012 decision. In our 2012 decision, we preserved much of the District's authority to enforce its ordinance. But the evidentiary hearing following our remand showed that many material facts are actually different from what we had to assume when we reviewed the grant of summary judgment, particularly with regard to the statutory authority for and the motivation and efficacy of the District's plan. We therefore find, with a few minor exceptions, that the modified permanent injunction was a sound exercise of the district court's discretion. We affirm the injunction with a few modifications.

I. Factual and Procedural Background

A. The Parties and Alarm Signaling and Monitoring

Appellant Lisle-Woodridge Fire Protection District ("the District") is a specific type of municipal entity established by the Illinois Fire Protection District Act ("the Act"), 70 Ill. Comp. Stat. 705/1 *et seq*. The District provides fire protection services to residents in the villages of Lisle and Woodridge, Illinois, and other unincorporated parts of DuPage County. Under the Act, the District has the power to set fire codes and to establish standards for fire alarm and dispatching services. 70 Ill. Comp. Stat. 705/6(i), 705/11. The District funds its work through taxes and is governed by a board of trustees. See 705/14.

The District does not receive fire alarms directly. Rather, fire alarms within the District are received and dispatched by intervening appellant DuPage Public Safety Communications, also known as "Du-Comm." Du-Comm is an inter-governmental entity made up of 28 member police and fire agencies in DuPage County, including the District. Du-Comm provides emergency dispatch services to those member agencies.

The plaintiff-appellees are private alarm companies that provide alarm and monitoring services to commercial properties in the District. For example, a warehouse, office building, or apartment complex may contract with an alarm company to install and monitor a building-wide alarm system. That system receives a fire alarm signal at the building's main alarm board from a smoke detector in the building and then transmits that signal to the local dispatcher to send emergency services. The alarm companies also provide monitoring services: in addition to fire alarm signals, the alarm boards also send "trouble" and "supervisory" signals, which indicate to the alarm companies either that the alarm board is not functioning or that someone at the premises has interfered with the system (e.g., shut off a water valve supplying the sprinkler system). The alarm companies receive the signals at "Central Stations," which need not be geographically close to the customer's premises. Often an alarm company will have one company-wide Central Station that it uses to receive and send dispatch signals for all of its customers.

Prior to this litigation, the plaintiff alarm companies provided alarm and monitoring services to their customers as follows: smoke and fire detectors in a building would send a signal to the alarm panel in the building, the alarm panel's communication device would send a signal to the alarm company's Central Station, and an operator at the Central Station would make a telephone call to Du-Comm for dispatching. An alternative to this "Central Station" model for fire alarm systems is the "Remote Supervising Station" model in which fire alarm and monitoring signals are transmitted from buildings to a facility other than a Central Station, such as a municipal dispatch board.

B. The 2009 Ordinance

In September 2009, the District passed an ordinance that attempted to overhaul alarm signaling and monitoring in the District. The ordinance required all commercial property owners to terminate their contracts with private alarm companies and instead to adopt and pay for an alarm and monitoring system provided by the District. Under the new system, alarm boards at commercial properties would be equipped with wireless transmitters owned by the District that would transmit alarm, trouble, and supervisory signals to a receiving unit located at the District's Fire Station 3. The receiving unit at Station 3 would automatically transmit the signals to another receiving unit at Du-Comm, which would then dispatch the relevant emergency response.

The District claimed that it switched to this system, which the District deemed a Remote Supervising Station system, because it was experiencing outages and other problems with the plaintiffs' private monitoring through Central Stations, including that alarm notifications were delayed and trouble signals indicating outages did not trigger prompt responses. DC-360 at 3; Freeman 265.¹ District officials claimed that the new system would provide two main advantages over the signaling and monitoring provided by the private alarm companies: (1) it was entirely wireless and automated, eliminating the need for a human-operated telephone call from a Central Station to Du-Comm and decreasing the time it took to respond to alarms, and (2) it connected all signals directly to the District's own board, allowing the District to monitor all signals and to ensure that all outages were addressed.

The District took bids from several companies to set up the system and provide the wireless transmitters. It settled on a company called Chicago Metropolitan Fire Prevention Company — also a defendant and appellant here. Chicago Metro would supply the transmission equipment: AES/Keltron-manufactured wireless radio transmitters for all the properties, the District's receiving unit at Station 3, and the second receiving unit at Du-Comm. (AES and Keltron radios are synonymous. Coveny 367.) The District sent a notice to all commercial property owners in the District, informing them that

¹ References to the district court docket are noted "DC-[docket number]," references to the Modified Permanent Injunction, found in the Appellants' appendices are noted "MPI [page number]," and references to the transcript of the evidentiary hearing held May 24-29, 2012 are noted "[Witness name] [page number]." Those transcripts are docket numbers 343-45.

the new ordinance had been adopted and that they would now be charged \$66 per month for the alarm and monitoring services and for the radio transmitter and its maintenance. The notice also boldly informed subscribers: "If you are under contract for monitoring with another vendor, our ordinance now supersedes those contracts and makes them null and void."

C. Proceedings Before the District Court

The alarm companies quickly filed suit in the Northern District of Illinois, alleging that the ordinance violated federal antitrust laws and federal constitutional guarantees of equal protection, due process, and the right to contract, and that the District did not have the legal authority to enact the ordinance under the Illinois Fire Protection District Act. On July 20, 2011, the District Court granted the alarm companies' motion for partial summary judgment, and on August 16, 2011 entered a permanent injunction enjoining the District from enforcing and implementing the Ordinance. The District and Chicago Metro appealed both the summary judgment order and the permanent injunction.

D. This Court's 2012 Opinion

On February 27, 2012, we issued an opinion ("*ADT I*"), reversing in part and remanding for further proceedings. See 672 F.3d 492 (7th Cir. 2012). We held that the District was authorized under the Act to require buildings to be

connected directly to its dispatching center and to require that the transmission network be wireless, but we found that the District was not authorized under the Act to be the sole provider of the necessary equipment. In essence, we found that the District had fairly broad authority in its capacity as a fire safety regulator but little if any authority to step in as a participant (or the sole participant) in the competitive market for commercial fire alarm signaling and monitoring services.

Looking first to the District's authority under the Act, we held that the Act permitted the District to require property transmitters to connect directly to the District's own receiving board and to require that the transmission system be wireless. Section 11 of the Act permits fire protection districts to "adopt and enforce fire prevention codes and standards parallel to national standards." 70 Ill. Comp. Stat. 705/11. We interpreted "parallel" to mean that the District could choose to require one acceptable option where national standards contemplated several acceptable options. *ADT I*, 672 F.3d at 501.

In the fire protection world, national standards include the National Fire Protection Association's "NFPA 72: National Fire Alarm and Signaling Code" (the "Code"). The Code contemplates the use of either a Remote Supervising Station system or a Central Station system. See NFPA 72 § 8.2, 8.4 (2002).² Given these options,

² In our 2012 decision we used the 2010 version of the Code, but as we will explain below, the 2002 version is the relevant (continued...)

we applied our interpretation of "parallel" to mean that it was within the scope of the District's authority under the Act to require the use of a Remote Supervising Station system to the exclusion of Central Stations. The Code permitted the use of *either* Central Stations *or* a Remote Supervising Station, and the District's system was a Remote Supervising System. We applied the same interpretation of section 11 to the District's wireless requirement and found that it too was "parallel" to the NFPA Code, which lists wireless radios as one acceptable method of transmitting signals. See *ADT I*, 672 F.3d at 502, citing NFPA 72 § 26.6.2.4.1 (2010); see also NFPA 72 § 8.5.2.4.1 (2002).

We affirmed the district court's grant of summary judgment to the extent it held that the District could not anoint itself or its chosen vendor as the exclusive provider of the wireless radio transmitters. We found that the Code did not authorize districts to do so and instead made property owners responsible for the equipment at their property. *ADT I*, 672 F.3d at 503 ("The District, by making itself the sole purveyor, installer, inspector, tester, and maintainer of the necessary radio transmitter equipment, has usurped responsibilities the NFPA code accords to property owners.").

We remanded to the district court for further proceedings in light of these holdings and to address the issues

² (...continued)

edition. The sections we relied on in *ADT I* are substantially similar in the 2002 edition.

remaining before the district court. We did not reach all remaining issues, but we addressed several issues to guide the district court in future proceedings. We noted that the District would not likely have an "effective monopoly" on monitoring and equipment if wireless transmitters other than the District's Keltron units would be compatible with the system, which it seemed to us was likely. We also noted that we interpreted the Act as not permitting the District to charge service fees to its residents beyond the taxes it is authorized to collect.

E. Proceedings on Remand

Upon remand, the district court held an evidentiary hearing to resolve factual disputes relevant to modifying the permanent injunction in light of our opinion. The court heard four days of testimony. Plaintiffs' witnesses included Louis Fiore, a consultant on alarm monitoring and a special expert to the NFPA, and Edward Bonifas, vice president of plaintiff Alarm Detection Systems. Defendants' witnesses included Thomas Freeman, Chief of the District, James French, the District's Bureau Chief for Fire Prevention, Lawrence Coveny of Chicago Metro, and Brian Tegtmeyer, the executive director of Du-Comm. Only Fiore was found to be an expert witness. See Tr. 53, 138-39 (district court permitted Fiore to testify as expert witness; plaintiffs' counsel withdrew Bonifas as opinion witness).³

³ Appellants argue that the district court abused its discretion in treating Fiore as an expert because the alarm companies (continued...)

After the hearing the district court ordered the parties to submit proposed findings of fact and proposals for a modified permanent injunction. On July 6, 2012 — seven days before the District's submissions were due - the District passed a new ordinance. DC-360 at 2; Joint Separate App. 66-75. The new ordinance repealed the 2009 ordinance and replaced it with a modified set of requirements. Under the new 2012 ordinance, the District would not own any transmitters and would permit property owners to contract with private companies for alarm transmission and monitoring and the necessary equipment. But the signals would still need to be transmitted via the District's wireless network to the District's receiver at Station 3 to be transmitted to the receiver at Du-Comm. Under this arrangement, the District would collect no fees from property owners but Du-Comm would

^{(...}continued)

did not provide an expert report prior to the hearing. See Fed. R. Civ. P. 26(a)(2)(B). But appellants had received Fiore's affidavit over a month before the hearing, and it covered substantially the same ground as his direct testimony. See DC-287, Ex. 1. The purposes of Rule 26(a)(2) were satisfied because the appellants had ample time to prepare for Fiore's testimony at the hearing and there was no showing of unfair surprise. To the extent that there were any discrepancies between his testimony and his affidavit, such differences were harmless. See *Banister v. Burton*, 636 F.3d 828, 833 (7th Cir. 2011) (failure to file 26(a)(2)(B) report was harmless where opposing party was not surprised by the content of the testimony). The district court did not abuse its discretion in allowing Fiore to testify as an expert witness.

collect fees on its behalf. The District argued before the district court that the new ordinance mooted the controversy; the plaintiff alarm companies disagreed.

F. Modified Permanent Injunction

On August 7, 2012, the District Court entered a Modified Permanent Injunction Order and issued accompanying factual findings and conclusions of law. The court adopted the alarm companies' findings of fact, conclusions of law, and proposed injunction provisions. In essence, the Modified Permanent Injunction⁴ required the District to permit the alarm companies to receive and transmit signals directly from property alarm boards (independently of the District) and to retransmit those signals to Du-Comm via Central Stations. Specifically, the injunction barred the District from: requiring that any fire signals be sent to Station 3 (instead it required that Station 3 be shut down), charging residents for fire protection services (including any fees charged by Du-Comm), selling or leasing fire alarm system equipment, and prohibiting signals from properties from being sent to Central Stations. The injunction required the District: to allow alarm companies to use any technology equivalent to wireless transmission and compliant with the NFPA code, to adopt the most current version of the NFPA code, to refund to property owners fees

⁴ We refer to the Modified Permanent Injunction simply as the "injunction," because it is the injunction we are reviewing in this opinion.

collected by the District since the 2009 ordinance took effect, to direct Du-Comm to cooperate with the alarm companies so it could receive wireless signals directly from Central Stations, and to direct Du-Comm to pre-populate its computer database with names and addresses of the private alarm companies' customers to decrease response times.

The injunction also prohibited the District from enforcing the new ordinance and redacted the 2009 ordinance in accordance with its provisions. The district court explained that, although many of the new provisions of the injunction seem to conflict with *ADT I*, that was because many of the factual assumptions that we had to make in *ADT I* turned out to be unsupported by the evidence presented at the hearing. The district court issued a separate memorandum explaining why the new ordinance did not moot the controversy.

The District and Chicago Metro appealed.⁵ They each point to many supposed flaws in the injunction and the accompanying findings of fact and conclusions of law. Most of their arguments do not persuade us. Rather, we agree with the district court that the new ordinance did

⁵ The District also sought a stay of the injunction from this Court, which we denied in part but granted to the extent that the injunction required the District to refund the fees it collected from resident subscribers. *ADT Securities, Inc. v. Lisle-Woodridge Fire Protection District,* Order, No. 12-2925; 12-2981 (7th Cir. Sept. 11, 2012) (dismissing Nos. 12-2219 and 12-2220 as moot).

not effectively moot this controversy. We also find no clear error in the district court's factual findings. Instead, the facts found by the district court after the evidentiary hearing persuade us that, while the legal principles of *ADT I* still stand, given the actual facts here, the new injunction sets appropriate boundaries for the District and does not contravene *ADT I* in most of the ways that the appellants argue. However, we find that several parts of the injunction exceed the proper scope of injunctions. We modify the injunction by striking the portions requiring the District to refund fees to subscribers and requiring the District to adopt the most current versions of the NFPA code. We thus affirm the injunction with a few modifications.

II. Discussion

The numerous arguments raised by the District and Chicago Metro on appeal fall into several categories. They argue that the injunction: (1) contravenes *ADT I* by barring the District from enforcing its direct-connect requirement, (2) exceeds the proper scope of injunctions by binding a non-party (Du-Comm) and awarding relief to non-parties (refunds to subscribers), and (3) ignores the 2012 ordinance that supposedly mooted the controversy or at least should have replaced the 2009 ordinance in the district court's analysis.

We have jurisdiction under 28 U.S.C. § 1292 to review an appeal from an injunction. (Several claims remain pending before the district court, so there has been no final judgment.) We review the district court's factual findings for clear error, its entry of the injunction for abuse of discretion, and its legal conclusions *de novo*. See *Knapp v. Northwestern Univ.*, 101 F.3d 473, 478 (7th Cir. 1996).

Based on the facts revealed at the evidentiary hearing, we find that the injunction is generally appropriate and not an abuse of discretion. When we first heard this case in ADT I, we reviewed the district court's grant of summary judgment. We were required to view the evidence and disputed facts in a light most favorable to the District and Chicago Metro. But the evidentiary hearing revealed many material facts to be quite different in reality from the inferences we were required to draw in the District's favor in ADT I, including such critical issues as the District's motive in enacting the ordinance, the efficacy of the new system, and the District's authority to implement the new system. The District and Chicago Metro object to many of these findings on appeal, but we reject those arguments.

Based on these findings, we find that the major elements of the injunction — shutting down the District's Station 3 and permitting private Central Stations to receive and transmit alarm signals — were well within the district court's discretion. Commercial properties in the District must have some form of fire alarm monitoring, but the District's plans and requirements for such services are beyond the District's legal authority, so it was appropriate for the district court to require the District to permit private alarm companies to provide that essential service. Moreover, the facts have revealed that the District's system is less reliable and more dangerous than the private alarm companies' systems, does not comply with NFPA standards, and interferes with the plaintiffs' ability to serve their customers.

The 2012 ordinance did not remedy these ills so as to render this dispute moot. It would have the effect of continuing to block the alarm companies from providing alarm monitoring services to customers in the District. To the extent the injunction includes Du-Comm even though it is not a party, we find that the injunctive measures involving Du-Comm are appropriate because Du-Comm expressed its willingness to cooperate in the ways required by the injunction. If Du-Comm does not follow through, the district court may need to determine Du-Comm's exact status with respect to the injunction, including whether it might be deemed an agent of the District and already subject to contempt powers, but we hope that will not be necessary. Despite our approval of the core elements of the modified injunction, we take issue with a few of its ancillary elements.

A. Mootness

We first address the threshold question of whether the 2012 ordinance mooted this dispute. See *Pakovich v*. *Verizon LTD Plan*, 653 F.3d 488, 492 (7th Cir. 2011). The District argues that its eleventh-hour repeal of the 2009 ordinance and replacement of it with the new ordinance mooted the entire controversy. The District argues both that the new ordinance rendered the modified permanent injunction moot and that, at a minimum, the district court erred by not analyzing the new ordinance instead of the 2009 ordinance. We find that the 2012 ordinance does not moot the dispute over the modified permanent injunction. The alarm companies would still face a variety of injuries stemming from the new ordinance.

The problem of mootness posed by a defendant's change in policy or practice poses a recurring problem when injunctive relief is sought. "[T]he mere cessation of the conduct sought to be enjoined does not moot a suit to enjoin the conduct, lest dismissal of the suit leave the defendant free to resume the conduct the next day." *Chicago United Indus., Ltd. v. City of Chicago,* 445 F.3d 940, 947 (7th Cir. 2006), citing *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.,* 528 U.S. 167, 189 (2000). But a case may still be moot if there is no reasonable expectation that the wrong will be repeated. *Chicago United Industries,* 445 F.3d at 947-49 (finding it "highly unlikely" that city would continue to deprive contractor of fair hearing, but case was not moot with regard to damages award).

Specifically, "[t]he complete repeal of a challenged law renders a case moot, unless there is evidence creating a reasonable expectation that the City will reenact the ordinance or one substantially similar." *Fed'n of Adver. Indus. Representatives, Inc. v. City of Chicago*, 326 F.3d 924, 930 (7th Cir. 2003). We apply a rebuttable presumption that government actors will not repeat objectionable behavior after an injunction is lifted. Id., citing City of Mequite v. Aladdin's Castle, Inc., 455 U.S. 283, 289 (1982) (case not moot where possibility remained that city would reenact previously enjoined ordinance language). This presumption can be rebutted if a local government reenacts provisions substantially similar to those initially repealed. See 13C Charles Alan Wright & Arthur R. Miller, et al., Fed. Prac. & Proc. § 3533.6 (3d ed.) ("repeal followed by reenactment of provisions similar to those repealed does not moot a continuing challenge"), citing Fireman's Fund Ins. Co. v. City of Lodi, 302 F.3d 928, 936 n.8 (9th Cir. 2002) (new ordinance and repeal of challenged ordinance while appeals were pending did not moot appeals where "core disputes between the parties remain[ed]").

Here, the new 2012 ordinance did not resolve the disputes between the parties. Under the new ordinance, alarm companies are permitted to receive alarm and monitoring signals at Central Stations, but they must transmit those signals to Station 3 via the District's wireless network so that the signals would then be sent from Station 3 to Du-Comm for dispatching. The District claims that the new ordinance removes the District itself from the monitoring business and permits the alarm companies to provide those services to customers in the District. But the new ordinance keeps several requirements from the original ordinance that would continue to injure the alarm companies by effectively blocking them from monitoring in the District or that are beyond the District's authority to impose. The first and most obvious is that the new ordinance keeps Station 3 as a central part of the District's monitoring plan. Under the new ordinance, according to the District, signals would be sent by Central Stations to Station 3 and then transmitted to Du-Comm. As we explain below, Station 3 does not meet the basic safety requirements to function as an intermediary station under the Code. The arrangement under the new ordinance would place even more of the fire alarm system's essential connections at the unsupervised Station 3 without back-up equipment than the original ordinance would have. This new requirement is not "parallel" to the Code and therefore is not within the District's authority to require under the Act. See 70 Ill. Comp. Stat. 705/11.

Second, to provide alarm monitoring and signaling, the alarm companies must join the District's wireless network. This network is accessible with only one specific type of transmitter, which is not the type the alarm companies use. See Coveny 376, 439. Although the alarm companies proposed using several other types of radios in an attempt to work with the District's wireless requirement, none are compatible with the type of network and receiver used at Station 3. Id. at 383-385. In fact, the new ordinance specifically states that alarm companies will have to transmit all their signals to a "Keltron 703 Communications Board" to gain access to the District's system. This requirement means that alarm companies must either replace all of their existing equipment and transmission technology or they cannot provide alarm monitoring services to customers in the District. See Coveny 439. Excluding alarm companies from the monitoring business or making it unduly burdensome for them to participate raises significant concerns about the anti-competitive effects of this requirement, and the new ordinance perpetuates rather than solves this problem.

Third, although the new ordinance technically permits the alarm companies to receive alarm signals at Central Stations, it requires the alarm and monitoring signals also to be sent simultaneously to the District's Station 3. Besides the fact that Station 3 does not comply with the Code, this requirement is problematic because current alarm transmitters for commercial properties generally are incapable of sending two signals simultaneously (*i.e.*, one to the Central Station and one to Station 3). Bonifas 180-81. Plaintiffs' witness Bonifas stated that such dual monitoring is "absolutely not" feasible, because in the District "there is an installed population of alarm panels already in place," a few of which may have the capability of adding equipment to allow two outputs, but the "vast majority will not." Id. He also explained that, when the District said that dual monitoring was possible, it used the example of Wal-Mart, which is a proprietary system and "has control of the alarm equipment that they buy," and "can choose a product that automatically has two outputs and hang two transmitters on it and make it work." Bonifas 180.

Without dual monitoring, alarm companies are effectively precluded from monitoring their equipment at protected properties because existing transmitters will be able to send only one signal and the new ordinance requires that a signal be sent to Station 3. The District's solution for this under the new ordinance is that the alarm companies would receive trouble and supervisory signal notifications in batch emails from the District. But this would not allow the companies to respond properly to these signals. Bonifas described his company's procedures for servicing broken equipment in response to trouble signals, and he explained that an email-based system is not compatible with this because emails will not populate the service logs for technicians in the field. Bonifas 155-56; see also id. at 215-16 ("Email would not put the history into the computer where we operate our entire 30,000 account base to our service technicians and dispatch them and let them see what has happened with the system."); id. at 184 ("We wouldn't be able to populate our service log and make sure that people get out and restore it, as well as the little tablet in the technician's hands."). Like the wireless network requirement, this requirement would effectively preclude the alarm companies from providing monitoring services and raises serious concerns about the anti-competitive effects of the new ordinance.

Thus, there is a reasonable expectation both that the alarm companies' complaints will not be satisfied by the new ordinance and that the new ordinance still exceeds the scope of the District's legal authority. The 2012 ordinance did not moot the dispute.

B. Factual Findings

In ADT I, we reviewed a grant of summary judgment, so the District benefitted from factual inferences in its favor and an under-developed record, particularly with regard to how the District's plan would address its concerns about the safety and efficacy of alarm monitoring in the District. See 672 F.3d at 496. But the facts found at the evidentiary hearing cast the District's actions in a very different light. Specifically, we have since learned that under the District's monitoring, building alarm boards were out of service at a higher rate than under the alarm companies' monitoring. Although the District's signals were responded to in a shorter time than those sent from Central Stations, that advantage easily could be achieved for signals sent from Central Stations too. And the District's wireless network operated on a frequency less reliable than typical fire alarm network frequencies.⁶ The district court

⁶ Other evidence that has come to our attention since *ADT I* suggests that the District may have been motivated to adopt the ordinance not only for the purported safety improvements, but also for financial gain. A PowerPoint presentation to the District's Board proposing the ordinance noted the "revenue stream" as an advantage of a "District-Owned Network," and emails from Keltron to a Municipal Alarm Board Forum encouraged the District to adopt its own network because "without the revenue being collected specifically from alarm subscribers for receiving alarm service, municipalities will be laying off dispatchers firemen inspectors and other people (continued...)

did not clearly err in adopting factual findings based on these revelations. See MPI Factual Findings ¶¶ 53, 59-60, 74-76.

1. System Reliability

Before the District took over all alarm monitoring with the ordinance, the alarm companies received monitoring signals through Central Stations and would send a technician out to assess and repair the alarm equipment. Edward Bonifas, an executive of one of the plaintiff alarm companies, described how his company would respond to these signals: "Under trouble signal we would first notify the client to let them know that the system is in trouble. If they are under a service contract, we would dispatch a service person to the building to determine what the trouble is, make a repair to it and put the system back to normal again." Bonifas 155. He explained that "our service technicians, when they get to the field, can review the history of the account right on their PC or tablet while they are standing in the customers' building, so they have full information for how the system has operated." Bonifas 184. Bonifas testified that with these procedures, "the average percentage of unrestored signals and out-of-service accounts for fire alarm

⁶ (...continued)

[[]sic]." See DC-303, Ex. I at 36; Ex. M at 70. The email blames the "central station industry" for these problems, claiming that it "is on a mission to take away all municipal monitoring and keep the revenue for themselves." DC-303, Ex. M at 70.

accounts in the District is at or under two percent," according to reports the company generates. Bonifas 161.

Testimony at the hearing revealed much higher out-ofservice rates with the District's monitoring. Bonifas testified that he analyzed hundreds of pages of unrestored signals and out-of-service reports from Du-Comm. He found that once the District's system became operational, over 12 percent of accounts were out of service at any point in time. Bonifas 185, 195. Under the District's system the District receives reports of outages and trouble and supervisory signals from Du-Comm. Records indicated that those reports had not been checked or reviewed at all. Bonifas 204. The District's witnesses disputed this number, claiming that the percent of outages was under 2 percent, Freeman 302-03, but after hearing testimony from both sides, the district court credited the testimony of the alarm companies in its factual findings. MPI Factual Findings ¶ 53. That finding was not clear error.

2. Response Times

One of the District's stated aims in passing the 2009 ordinance was to shorten the response times — the time from when "a detection system noticed a smoke or fire condition to the time [the District was] notified" or dispatch services were sent. See Freeman 265. According to Du-Comm, it could receive and dispatch alarms from private Central Stations in less than 60 seconds, but from Station 3 under the District's system in less than 30 seconds. Tegtmeyer 466-67. The reason for this difference was that all of the addresses and other necessary dispatch information for the District's subscribers were "pre-populated" into Du-Comm's computers. The same information for the alarm companies' customers was not similarly pre-populated in Du-Comm's computers. When pressed, though, Du-Comm's executive director testified that Du-Comm would be able to pre-populate its database to include address and other information for the alarm companies' customers, which would then reduce the average dispatch times for those alarms to less than 30 seconds, the same as if the alarm came in from the District's Station 3. Tegtmeyer 496; see also *id.* at 466-67.

3. Radio Network Interference

The evidentiary hearing also revealed that the District's new wireless network operates on a less reliable frequency than fire and safety signals usually do. The FCC licenses two main types of private (*i.e.*, not for commercial purposes) radio frequencies: "Public Safety Pool" and "Industrial/Business." See 47 C.F.R. § 90.1. The frequency the District uses to connect the Keltron units at properties to Station 3 is an "Industrial/Business" frequency.⁷ The industrial/business frequency ac-

⁷ We take judicial notice of the license for this frequency, call number WQKZ720, which labels the radio service as "IG – Industrial/Business Pool, Conventional." Available at FCC License Search, http://wireless2.fcc.gov/UlsApp/UlsSearch/ searchLicense.jsp (last visited July 29, 2013).

tivities (such as the "operation of educational, philanthropic, or ecclesiastical institutions"). See 47 C.F.R. § 90.35. This can include taxis, farmers, and other businesses. See In re Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Servs. & Modify the Policies Governing Them & Examination of Exclusivity & Frequency Assignments Policies of the Private Land Mobile Servs., 12 F.C.C. Rcd. 14307, 14317, 14328 (1997) ("Similarly, frequencies initially set aside for taxicabs (Taxicab Radio Service) could be used in rural areas by farmers or in the operation of mines," and describing industrial/business pool as for where, for the most part, "radio is used to support business operations"). In contrast, the public safety pool is for police activities, life-support services, and other activities involving important and emergency functions, including fire protection. 47 C.F.R. § 90.20.

The alarm companies' expert testified that the Industrial/Business Pool is less reliable than the Public Safety Pool because it is less secure and more susceptible to interruptions: "So someone with a taxicab company that you have no control over could be on this frequency, key a microphone for several minutes, and knock out several AES radios." Fiore 519. See also *In re Replacement of Part 90*, 12 F.C.C. Rcd. at 14312 (describing purpose of Public Safety Pool: "We considered these guidelines necessary to prevent overcrowding and to maintain the integrity of critical functions of the users included within this pool.").

Thus, the facts revealed by the evidentiary hearing substantially alter our understanding of the factual back-

ground of this case. We are no longer required to give the District the benefit of favorable inferences required by the summary judgment posture of *ADT I*, and we now know more about the District's motives for its new monitoring plan and the shortcomings of that new plan in terms of safety and reliability.

C. The Injunction Compliance with ADT I

Significant new facts were also presented at the evidentiary hearing regarding our analysis in *ADT I* of the District's statutory authority under the Act. We held that the District had the regulatory authority to impose the "direct connect" requirement — which we understood to require that alarm signals be sent directly from properties to a Remote Supervising Station, rather than through the "middlemen" Central Stations. *ADT I*, 672 F.3d at 496, 501. We found that opting for a Remote Supervising Station model instead of a Central Station model was "parallel" to the NFPA code so that the District had the authority under the Act to impose the requirement.

The evidentiary hearing after our remand, however, revealed several facts that alter our analysis of the District's authority to impose the "direct connect" requirement. These findings show that the District's system is in fact not any more "direct" than the pre-ordinance private arrangements because it routes all signals through Station 3, whereas the prior arrangement similarly routed signals through Central Stations. Moreover, Station 3 itself does not comply with national standards. As actually implemented, therefore, the District's "direct connect" requirement was not within its statutory authority to impose regulations "parallel to national standards." See 70 Ill. Comp. Stat. 705/11. We therefore find that the district court acted within its discretion in enjoining the District from requiring all signals to route through Station 3 rather than Central Stations.

1. Station 3 Not a Remote Supervising Station

First, our reasoning in ADT I rested on the understanding that the District's Station 3 was the Remote Supervising Station — the facility receiving signals directly from protected properties with no intermediary stop in between. But it turns out that Station 3 is not the Remote Supervising Station. Du-Comm is the Remote Supervising Station, and signals are transmitted first to Station 3 before being sent on to Du-Comm. This means that the District's "direct connect" requirement is no more "direct" than the pre-ordinance arrangements, as both arrangements involved transmitting signals from point A to B to C: A (property) to B (Station 3 or Central Station) to C (Du-Comm). The District argues that the transmission from Station 3 to Du-Comm is not a second transmission but an "autotransmission" such that the signal from the property should be understood to be transmitted from Station 3 to Du-Comm automatically. But this does not make the path from a protected property to Du-Comm "direct," as the signal is still transmitted through Station 3, even if that happens automatically when the system is working as it is supposed to.

2. Station 3 Does Not Meet NFPA 72 Code Standards

In any event, Station 3 suffers from a second, more fundamental problem that was revealed during the evidentiary hearing. It does not conform to the applicable Code at all. The parties dispute this vigorously, beginning with which edition of the Code to use. The District has adopted the 2002 edition of NFPA 72, so we use that edition of the Code. (As we explain below, the District is not obligated to adopt or hold itself to a new edition.) Regardless, the 2002 and later editions have nearly identical language (albeit under different section numbers) in the relevant sections. Compare NFPA 72 § 8.2, 8.4 (2002), with NFPA 72 § 26.3, 26.5 (2010).⁸

More fundamentally, the parties dispute how the Code would characterize Station 3 and what requirements apply to it as a result. The alarm companies argue that Station 3 should be considered a "subsidiary station" under the Code, which the Code defines as a separate, unsupervised station through which signals can be transmitted to a supervising station. See NFPA 72 § 3.3.192 (2002). As a subsidiary station, Station 3 would be subject to the Code's safety, reliability, and security standards for such a station. See NFPA 72 § 8.2.5.2 (2002).

The District and Chicago Metro argue that Station 3 is not a subsidiary station and is not subject to any

⁸ The parties submitted hard copies of the NFPA 72 standards, which are not otherwise readily available. We include the text of the relevant provisions in the Appendix.

specific safety or reliability standards. They argue that the requirements for subsidiary stations are in the portion of the Code applicable to Central Stations, and because the District operates a Remote Supervising Station fire alarm system, those requirements cannot apply to Station 3.⁹ They argue instead that Station 3 is an "alternate location":

Where permitted by the authority having jurisdiction, fire alarm and supervisory signals shall be permitted to be received at an alternate location approved by the authority having jurisdiction.

NFPA 72 § 8.4.2.1.2.* (2002).

The term "alternate location" is not defined in the Code, and the Code does not appear to articulate any requirements for "alternate locations." We asked counsel for the District during oral argument what requirements such an alternate location would need to meet, and he identified none. So the District's apparent position is that the Code considers Station 3 to be an "alternate location" under section 8.4 and as such does not subject it to *any* requirements for safety, security, and reliability.

We find the alarm companies' position — that Station 3 is at least subject to the requirements of a "subsidiary

⁹ The Code includes separate sections governing Central Station fire alarm systems and Remote Supervising Station fire alarm systems: section 8.2 governs Central Stations while section 8.4 governs Remote Supervising Stations. See NFPA 72 § 8.2, 8.4 (2002).

station" under chapter 8 — to be more persuasive than the District's position that the station is subject to no requirements at all.

There are several problems with the District's interpretation. First, the section it cites as permitting signals to be routed through an "alternate location" actually refers to the destination location — the Remote Supervising Station itself (like Du-Comm), not an intermediary location such as Station 3. See NFPA 72 § 8.4.2.1 (2002) (permitting two options for facilities to serve as the remote supervising station itself, including an "alternate location"). Any facility serving as the destination remote supervising station must meet substantive requirements, including that the "remote supervising station shall have not less than two trained and competent persons on duty at the remote supervising station at all times." NFPA 72 § 8.4.3.5.1 (2002). This section does not say that the District may designate an "alternate location" as an intermediary station through which to route signals before they arrive at the Remote Supervising Station. In fact, nothing in section 8.4 contemplates that alarm signals under a remote supervising system would be transmitted through an intermediary station at all. Section 8.4 does contemplate retransmission in subsection 8.4.3.4, but that applies to transmissions from the Remote Supervising Station to another location. NFPA 72 § 8.4.4.1 (2002) (alarm signals shall be immediately retransmitted if the Remote Supervising Station is at a location other than the public fire services communications center).

Second, even if section 8.4's reference to an "alternate location" could refer to an intermediary station between properties and the remote supervising station, it is unlikely that such a station would not be subject to any NFPA requirements. The reference note to that section indicates: "A listed central station might be considered an acceptable alternate location for receipt of fire alarm and supervisory signals." NFPA 72 § A8.4.2.1.2. (2002) (Such an arrangement was precisely how the District operated before the 2009 ordinance, with Central Stations receiving alarm and supervisory signals.) The Code is otherwise silent as to what an "alternate location" may be or entail, but its only guidance indicates that the Code contemplates that it could be a Central Station, and Central Stations are held to higher standards than subsidiary stations. Compare NFPA 72 § 8.2.5.2 et seq. (2002) (listing requirements for subsidiary stations), with § 8.2.6.2.1 (requirements for Central Stations, including two supervising personnel at all times, which match the personnel requirements for Remote Supervising Stations under section 8.4.3.5.1). Thus, on our reading, section 8.4 does not contemplate an intermediary station at all, but rather transmission from properties directly to a supervised station (either a Central Station or another location meeting the personnel requirements of section 8.4.3.5.1).

Third, the District's position seems implausible, as we doubt that the Code would permit a fire district to do what the District has attempted to do here: reroute transmissions to a receiver in an unsupervised room with no back-up equipment and no mechanism in place to restore signal transmission quickly if there are technical problems. Chicago Metro's witness Larry Coveny testified that if the receiver at Station 3 stopped functioning, the following steps would have to be taken to repair it: Du-Comm would have to receive a signal that it was down, Du-Comm would then call the District, someone at the District would then call Chicago Metro, and Chicago Metro would then send someone out to fix the head-end unit. Coveny 453. This process could likely take several hours, which we doubt the Code should be interpreted to permit, since it requires subsidiary stations under section 8.2 to have redundant equipment functioning as back-up within 90 *seconds*. See NFPA 72 § 8.2.5.2.3.

In contrast, the alarm companies' argument that Station 3 is a "subsidiary station" and must meet the applicable requirements is a more sensible reading. A "subsidiary station" is defined as

a normally unattended location that is remote from the supervising station and is linked by a communications channel(s) to the supervising station. Interconnection of signals on one or more transmission channels from protected premises with a communications channel(s) to the supervising station is performed at this location.

NFPA 72 § 3.3.192 (2002).

This describes Station 3 in all material respects: it is unattended, remote from the remote supervising station (Du-Comm), linked by a communications channel (the wireless radio network) to Du-Comm, and connects signals from properties to Du-Comm. The Code defines a "supervising station" as "a facility that receives signals and at which personnel are in attendance at all times to respond to these signals." NFPA 72 § 3.3.193 (2002). We recognize that the requirements for subsidiary stations are found in section 8.2, which applies to Central Station fire alarm systems, but this seems the best fit for Station 3, as section 8.4 does not contemplate an intermediary station at all.

Thus, either the Code does not contemplate an intermediary retransmitting station at all, or such a station is a "subsidiary station" and must meet the requirements of section 8.2.5. We think the latter is the better reading. So did the alarm companies' expert, Louis Fiore, who helped write the Code. He said that "when we wrote 8.4, we didn't envision this configuration" (referring to an intermediary station between properties and the Remote Supervising Station), but that he would instead apply the requirements for a subsidiary station from section 8.2 to such a station. See Fiore 109.

As the district court correctly found, Station 3 does not meet the requirements of section 8.2.5.2 (including subsection 8.2.5.2.3). It does not have the necessary equipment for a backup channel to be "operational within 90 seconds," § 8.2.5.2.3, and it does not meet the independent certification requirements of "UL 827," see § 8.2.5.2, which require redundant equipment and channels. Station 3 is not certified by UL 827 and there is only one receiving unit at Station 3. Coveny 453 (only one receiving unit at Station 3); Fiore 126-27 (no evidence that Station 3 meets NFPA Code). Thus, the evidentiary hearing revealed that Station 3 does not meet the Code standards, leaving plaintiffs' Central Stations as the only Code-compliant means of transmitting alarm signals from properties in the District to Du-Comm. In light of these facts, the district court acted within its discretion to require the District to shut down Station 3. Because the Code requires commercial properties to have fire alarm monitoring, and the injunction put Station 3 out of commission, only Central Stations are currently a viable option for alarm monitoring in the District. The injunction therefore appropriately required the District to permit signals to be sent to Central Stations so that fire alarm monitoring in the District would remain compliant with the NFPA Code.

D. Injunction as Applied to Du-Comm

The injunction also includes provisions requiring the District to enlist Du-Comm's cooperation in enabling Central Stations to monitor. First, in light of the district court's finding that Station 3 was not in compliance with the Code and that the District must therefore permit Central Stations to transmit and monitor alarm signals, the district court enjoined the District to:

direct DuComm to cooperate as reasonably required by the Alarm Companies to implement a procedure so that central stations can automatically retransmit fire alarm signals to the DuComm SIS computer and, to the extent that DuComm upgrades its CAD system to receive fire alarm signals through NLETS, ASAP to PSAP transmissions.

MPI ¶ 5.

Second, given that fire alarm signals received from Central Stations would take 30 seconds longer to dispatch than those received from Station 3, but only because the relevant addresses were not pre-populated in Du-Comm's computers, the district court also ordered the District to:

direct DuComm to cooperate as reasonably required by the Alarm Companies in the implementation of a procedure to populate the DuComm CAD system with the necessary information about the Commercial Accounts to reduce the time lag in dispatching emergency vehicles and fire trucks, consistent with the method now being employed by DuComm for the District's Commercial Accounts.

MPI ¶ 4.

Appellants and intervenor Du-Comm argue that these provisions of the injunction improperly bind Du-Comm, which is not a party to the suit. Federal Rule of Civil Procedure 65 permits courts to enjoin a party's "officers, agents, servants, employees, and attorneys" and "other persons who are in active concert or participation" with a party or its officers or agents, so long as those persons have received actual notice of the injunction. Fed. R. Civ. Proc. 65(d)(2)(B)-(C). The parties dispute both whether Du-Comm is an "agent" of the District, given that it is governed and directed by a board made up of representatives from its member agencies, including the District, see Tegtmeyer 501; Freeman 277-78, and whether it received sufficient notice of the injunction. District courts have broad discretion to enjoin third parties who receive appropriate notice of the court's injunctive order. *H-D Michigan, LLC v. Hellenic Duty Free Shops S.A.*, 694 F.3d 827, 842 (7th Cir. 2012).

As interesting as the problem of the precise legal status of Du-Comm may be, the injunction does not apply directly to Du-Comm. It directs the District to "direct Du-Comm to cooperate." And Du-Comm's executive director Brian Tegtmeyer testified that Du-Comm is able to cooperate with the District in the ways described by those paragraphs. At the evidentiary hearing, he testified about Du-Comm's ability to pre-populate its computer with the addresses and information of the alarm companies' customers. In response to a question asking "if the alarm companies gave you the same data and you assign a position for each of those commercial accounts, you could input it into the same computer, correct?" Tegtmeyer answered, "I could input the same information into the computer, the dispatch computer." Tegtmeyer 496; see also id. at 489-90 (answering yes, that Du-Comm could prepopulate if Central Stations gave the information, but that "we have never discussed the methodology" and "we haven't done it," but that Du-Comm would not need any more equipment to do it).

As to the fifth paragraph, although Du-Comm does not yet have the capacity to receive the specific type of connection that the alarm companies' expert testified would allow Central Stations to transmit signals directly to Du-Comm's computer, the expert testified that enabling Du-Comm's computer to do so would involve a software change that would be an "easy fix." Fiore 122.

We read paragraphs four and five of the injunction as imposing a direct obligation on only the District, but with the understanding that Du-Comm appears ready to cooperate with the District in carrying out the requirements of those paragraphs. If Du-Comm refuses the requests of its member agency, the District, the district court may need to consider (a) whether the existing injunction supports holding Du-Comm in contempt under Rule 65, particularly whether Du-Comm is an "agent" of the District and whether Du-Comm received sufficient notice of the injunction for it to be bound directly by the injunction, or (b) whether to consider modifying the injunction after appropriate proceedings so as to remove any arguable uncertainty. See Fed. R. Civ. P. 65(d)(2)(B); see also Lake Shore Asset Management Ltd. v. Commodity Futures Trading Comm'n, 511 F.3d 762, 767 (7th Cir. 2007) (Rule 65's notice requirement means party's agent falls under Rule 65(d)(2)(B) or (C) only after the agent in question "is given notice and an opportunity to be heard," including the opportunity to present evidence on the question of its relation to the party). Although Du-Comm certainly now has notice of the injunction and has had the opportunity to dispute its relationship to the District in this appeal, we need not resolve here whether that meets Rule 65's requirements, nor whether Du-Comm is an agent of the District.

Unless and until Du-Comm changes its mind about prepopulating its databases or reprogramming its computer so Central Stations can automatically transmit signals there, we need not address those issues. Certainly, the evidence appears undisputed that these are steps that would enhance safety by improving response time and transmission reliability, and we have difficulty imagining why Du-Comm would resist such improvements. Given Tegtmeyer's testimony about Du-Comm's ability to cooperate on these safety measures, we would be surprised if Du-Comm chose to contest further the agency and notice issues under Rule 65. If it does, the district court can take appropriate steps to ensure compliance with its injunction.

E. The New Ordinance

For the reasons above, we find that the injunction appropriately prohibits the District from enacting the basic components of its monitoring plan in light of the facts found at the evidentiary hearing because the District lacks the legal authority to enact its plan. The District now claims that its 2012 ordinance avoids the problems posed by its 2009 ordinance and that the injunction improperly disregarded it. Rather than analyzing the new ordinance in light of *ADT I* and the evidentiary hearings, the district court enjoined the District from enforcing the new ordinance and modified the original ordinance by redacting it to conform with *ADT I* and its new factual findings. MPI ¶¶ 20, 1. We can understand the district court's reluctance to undertake the task of modifying its work on the injunction to account for the District's last-second effort to avoid further litigation. The District passed the new ordinance just days before its proposed findings and conclusions and supporting memoranda for the modified preliminary injunction and summary judgment were due.

But although the 2012 ordinance did not moot the controversy, it did replace the 2009 ordinance, so the 2012 ordinance is the relevant District action for the purposes of our analysis and we will directly review its legality. This keeps the courts from standing on the shaky ground of requiring the District to revive its already-repealed ordinance. See, *e.g., De Soto Sec. Co. v. C.I.R.*, 235 F.2d 409, 411 (7th Cir. 1956) ("The courts can only interpret congressional acts. They cannot legislate.").

We find that the following portions of the new ordinance must be struck to conform it to our opinion today and in *ADT I*:

In section 2.3, the last sentence shall be struck: "The District shall, however, maintain the Communications Board for purposes of receiving and relaying to Du-Comm, Generated Signals transmitted from Affected Properties via networks maintained by Licensed Alarm companies, as contemplated by the provisions of this Ordinance."

This sentence conflicts with paragraph 7 of the injunction, which requires the District to shut down its alarm board at Station 3. Because we agree with the district court that Station 3 does not comply with the relevant portions of the Code, the new ordinance cannot permit Station 3 to continue operating, and this sentence must be struck.

Section 2.4 shall be redacted as follows:

The Owners of all Affected Properties, on or before the date for compliance set forth in Section 4.1 hereof, shall engage a Licensed Alarm Company of the Owner's choice to provide a wireless radio connection capable of instantly transmitting all Generated Signals directly to the Communications Board maintained by the District for purposes of receiving, identifying and instantly transmitting said Generated Signals by wireless radio direct connection to Du-Comm. Said Generated Signals shall be delivered directly to the District's Communications Board by the Owner's alarm company by the method contemplated by Section 3.1 hereof, or by such alternate method as may be approved by the Chief of the District's Fire Prevention Bureau ("Bureau Chief") upon application as provided in Section 3.2, which said approval shall not be unnecessarily withheld.

All Affected Properties shall be equipped with wireless radio transmitters capable of sending Generated Signals through a Licensed Alarm Company's wireless radio network, as set forth in Section 3.1 hereof, which network shall be directly connected to the District's Communications Board. Said wireless transmitters shall each have at least 60 hours of secondary power.

The District cannot require the alarm companies to transmit signals through a wireless network "directly connected to the District's Communications Board" because Station 3 does not comply with the Code. The District also cannot require alarm companies to use its wireless radio network exclusively, as that network relies on the receiver at Station 3. Moreover, the District's wireless network is compatible with only one type of wireless radio transmitter. See Coveny at 376, 439. As we discussed above, requiring a specific type of transmitter raises substantial antitrust issues. But because we find that the District can no longer operate Station 3 or require signals to be transmitted through it, we need not resolve that issue now.

- Section 2.5 is struck in its entirety, as the District is not permitted to operate its "Communications Board," *i.e.*, Station 3.
- Section 2.6 is struck.

To the extent that the fees Du-Comm assesses are derivative fees that the District would not have the authority to assess on its own, and because the District cannot assess fees for fire alarm signaling and monitoring, Du-Comm cannot assess such fees on the District's behalf. See *ADT I*, 672 F.3d at 504-05.

In section 3.1, all text following "All Generated Signals shall be transmitted through a wireless radio network operated and maintained by a Licensed Alarm Company," is struck.

The District cannot require the alarm companies to connect to Station 3, which renders the rest of the language about access to the board and applications for such access superfluous. • Section 3.2 is struck in its entirety.

No approval process is necessary because the District is not permitted to require direct connection to the board at Station 3 or to Du-Comm.

Given the severability clause in section 8.1, all other portions of the new ordinance may remain. They need not be struck, though many will likely be rendered somewhat irrelevant given what remains of the ordinance. Substantively, the essence of what remains is that commercial property owners are required to use wireless transmission through private alarm companies.

F. Remaining Issues

We have rejected the District's and Chicago Metro's primary arguments about the district court's compliance with ADT I, Du-Comm's involvement, and the new ordinance. In addition to these arguments, the District and Chicago Metro complain about numerous other aspects of the injunction. We have considered their arguments and find little merit. Many of their arguments are undeveloped and unsupported. See United States v. Berkowitz, 927 F.2d 1376, 1384 (7th Cir. 1991) ("We repeatedly have made clear that perfunctory and undeveloped arguments ... are waived (even where those arguments raise constitutional issues)."). But a few of their arguments raise valid concerns with the injunction, so we modify the injunction in a few minor respects to account for those arguments, in addition to the modifications we made to the 2012 ordinance.

1. Refunds to Subscribers

First, we agree that paragraph 17 of the injunction is problematic. It requires the District to "refund to the affected Commercial Accounts all monies collected by [the] District for fire alarm monitoring since the inception of the Ordinance." MPI ¶ 17. This is problematic because the subscribers who would receive such refunds are not parties to this case. See, e.g., McKenzie v. City of Chicago, 118 F.3d 552, 555 (7th Cir. 1997) ("The fundamental problem with this injunction is that plaintiffs lack standing to seek — and the district court therefore lacks authority to grant — relief that benefits third parties."). While we realize it may seem more efficient to deal with customers' potential claims against the District in this proceeding, the question of whether and what amount of refunds such subscribers should receive is sufficiently complex that it warrants more attention and process than we can give it on this record. For example, the subscribers who paid for the District's monitoring services at least received those monitoring services, even if the District was not permitted by statute to provide them and even if the quality and reliability were worse than promised. So the subscribers may not be entitled to a complete refund, but rather the refund may need to be mitigated to account for the reasonable value of the alarm monitoring services the District actually provided them during that time. Cf. 26 Williston on Contracts § 68:1 (4th ed.) (award for reasonable value of services rendered is permitted under unjust enrichment, even when "the contract is unenforceable because of a lack of capacity of one of the parties").

2. Adopting the Code

Paragraph 9 of the injunction requires the District to "adopt the current version of the NFPA Code" and to "adopt such newer versions when they are issued." MPI ¶ 9. We do not see a legal basis for such a requirement. Rather, courts have acknowledged which version of NFPA codes municipalities adopt without commenting on the propriety of having adopted a version from years past. See, e.g., Alliance for Mentally Ill v. City of Naperville, 923 F. Supp. 1057, 1062 (N.D. Ill. 1996) (noting "Naperville adopts the 1991 version of the Life Safety Code ("LSC"), published by the National Fire Protection Association ("NFPA")"), abrogated on other grounds by *Hemisphere* Bldg. Co. v. Village of Richton Park, 171 F.3d 437 (7th Cir. 1999). The Code itself includes no requirement that municipalities adopt the most recent version. Its "Code Adoption Requirements" section states merely that "[t]his Code shall be administered and enforced by the authority having jurisdiction designated by the governing authority." NFPA 72 § 1.7 (2002) (language remains same through 2013 version). Without a legal basis for requiring that the District adopt the most recent version of the Code and continue to do so with every revision, paragraph 9 of the injunction must be removed.

3. Timing

We raise a final concern with the modified permanent injunction — that its duration is indefinite. It is of course a permanent injunction, but we can easily imagine that at some point in the future, the circumstances giving rise to the injunction will change and the injunction may therefore also need to change or may no longer be necessary. The district court retains the power to modify the injunction further if the circumstances so warrant. Given that the injunction addresses this particular time, current technology, and a current set of market problems, we are confident that the district court will keep the door open to necessary modifications in the public interest, while keeping in mind the themes and tension underlying this case: balancing a municipal entity's legitimate regulatory authority while protecting the market from unlawful monopolistic activity.

III. Conclusion

The modified permanent injunction generally comports with *ADT I* and appropriately enjoins the District's activity with regard to alarm monitoring in the District. The injunction must be modified as noted above with regard to the new ordinance, the subscriber refunds, and requiring the District to adopt a certain version of the NFPA Code. But it is otherwise a reasonable exercise of the district court's discretion in light of all the evidence, particularly the testimony at the evidentiary hearing following *ADT I*. The injunction is forceful, but given the District's and Chicago Metro's history of recalcitrance throughout this litigation, the district court was justified in taking strong measures.

AFFIRMED AS MODIFIED.

APPENDIX

Relevant Portions of NFPA 72 (2002) (all other portions omitted)

Chapter 1: Administration

1.7 Code Adoption Requirements. This Code shall be administered and enforced by the authority having jurisdiction designated by the governing authority.

* * * *

Chapter 3: Definitions

3.3.192 Subsidiary Station. A subsidiary station is a normally unattended location that is remote from the supervising station and is linked by a communications channel(s) to the supervising station. Interconnection of signals on one or more transmission channels from protected premises with a communications channel(s) to the supervising station is performed at this location.

3.3.193 Supervising Station. A facility that receives signals and at which personnel are in attendance at all times to respond to these signals.

* * * *

Chapter 8: Supervising Station Fire Alarm Systems

8.2 Fire Alarm Systems for Central Station Service. Fire alarm systems used to provide central station service shall comply with the general requirements and the use requirements of Section 8.2.

* * * *

8.2.5 Facilities.

8.2.5.1 The central station building or that portion of a building occupied by a central station shall conform to the construction, fire protection, restricted access, emergency lighting, and power facilities requirements of the latest edition of ANSI/UL 827, *Standard for Safety Central-Station Alarm Services*.

8.2.5.2 Subsidiary station buildings or those portions of buildings occupied by subsidiary stations shall conform to the construction, fire protection, restricted access, emergency lighting, and power facilities requirements of the latest edition of ANSI/UL 827, *Standard for Safety Central-Station Alarm Services*.

8.2.5.2.1 All intrusion, fire, power, and environmental control systems for subsidiary station buildings shall be monitored by the central station in accordance with 8.2.5.

8.2.5.2.2 The subsidiary facility shall be inspected at least monthly by central station personnel for the purpose of verifying the operation of all supervised equipment, all telephones, all battery conditions, and all fluid levels of batteries and generators.

8.2.5.2.3 In the event of the failure of equipment at the subsidiary station or the communications channel to the central station, a backup shall be operational within 90 seconds.

8.2.5.2.4 With respect to 8.2.5.2.3, restoration of a failed unit shall be accomplished within 5 days.

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8.2.5.2.5 Each communications channel shall be continuously supervised between the subsidiary station and the central station.

8.2.5.2.6 When the communications channel between the subsidiary station and the supervising station fails, the communications shall be switched to an alternate path. Public switched telephone network facilities shall be used only as an alternate path.

8.2.5.2.7 In the subsidiary station, there shall be a communications path, such as a cellular telephone, that is independent of the telephone cable between the subsidiary station and the serving wire center.

8.2.5.2.8 A plan of action to provide for restoration of services specified by this Code shall exist for each subsidiary station.

* * * *

8.4 Remote Supervising Station Fire Alarm Systems

8.4.2* Facilities

8.4.2.1 Fire alarm systems utilizing remote supervising station connections shall transmit fire alarm and supervisory signals to a facility meeting the requirements of either 8.4.2.1.1 or 8.4.2.1.2.

8.4.2.1.1 Fire alarm and supervisory signals shall be permitted to be received at the public fire service communications center, at the fire station, or at the governmental agency that has the public responsibility for taking prescribed action to ensure response upon receipt of a fire alarm signal.

8.4.2.1.2* Where permitted by the authority having jurisdiction, fire alarm and supervisory signals shall be permitted to be received at an alternate location approved by the authority having jurisdiction.

8.4.3 Equipment and Personnel

8.4.3.4 Retransmission of an alarm signal, if required, shall be by one of the following methods, which appear in descending order of preference as follows: ...

8.4.3.5.1 The remote supervising station shall have not less than two trained and competent persons on duty at the remote supervising station at all times to ensure disposition of signals in accordance with the requirements of 8.4.4.

8.4.4 Operations

8.4.4.1 If the remote supervising station is at a location other than the public fire service communications center, alarm signals shall be immediately retransmitted to the public fire service communications center.

References

A.8.4.2.1.2 A listed central station might be considered an acceptable alternate location for receipt of fire alarm and supervisory signals.

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7-31-13