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## Vodafone Downed by Burglars

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We can imagine many disasters that can take down a data center – floods, fires, earthquakes, explosions. But what about theft of equipment? That is what happened to a Vodafone telephone exchange late one night.

### Vodafone



Vodafone is the world's largest mobile telecommunications carrier in the world as measured by revenues. Coming behind only China Mobil, it is the second largest carrier as measured by subscribers, with over 300 million customers. Headquartered in the UK, Vodafone provides services directly in over 30 countries and through partners in over 40 additional countries. It owns 45% of Verizon, the largest mobile telecommunications company in the United States.

### The Break-In

Shortly after midnight on Sunday, February 28, 2011, a large swath of Vodafone customers in southern England suddenly found themselves without mobile services. Voice, texting, and mobile Internet services had all disappeared. Subscribers from Oxford in the north to Salisbury in the south were impacted.



It seems that thieves had used sledgehammers to break into a major Vodafone mobile hub in Basingstoke and had made off with racks of computers and networking equipment. The hub connected mobile users throughout southern England with the Vodafone cellular network.



Daily Mail, March 1, 2011

The stolen equipment is reported to have been worth several million pounds. It was the network gear that recognized mobile phone SIM cards and connected the phones to the mobile network. Without this capability, no cell phone service could be provided to Vodafone customers. The network was dead.

The telephone exchange is in a nondescript building that sits on an anonymous site in an industrial park. Vodafone took precautions to not advertise the purpose of the building. However, the thieves were astute

enough to know what the importance of the building was.

It evidently took Vodafone a while to determine what had happened. The police arrived on the scene about 5 AM and began their investigation while Vodafone scrambled to restore service. Vodafone was able to restore voice service in the late morning, eleven hours after the outage began. Text and Internet services were not restored until mid-afternoon.

Vodafone stated that several hundred thousand customers were affected. Other reports put the tally at three to seven million customers. Vodafone has 19 million customers in England.

## The Motive

The motive for the theft may never be known if the perpetrators are not apprehended. However, the general consensus is that the equipment is destined for Eastern Europe where there is a thriving black market in IT equipment. The thieves took very specialized telecommunications equipment – they seemed to know what they wanted.

Other theories are that the thieves were looking for copper. Thefts of copper cables occur regularly as copper fetches a good price on the black market. However, cables were left relatively intact.

Another thought was that the thieves wrongly believed that the computers held personal account details that might be useful for ID fraud. If the theft had included Home Location Register computers, this would have been a problem. However, Vodafone assured its customers that there were no security risks in the theft.

## Keeping Customers Informed

Losing mobile service for the better part of a day was bad enough for Vodafone's customers. But based on blog postings and tweets, what really aggravated its customer base was the lack of communications. No one knew what was happening, nor did they have any indication of when service would be restored.

Reportedly, the first post that Vodafone made to its web site relative to the outage was not until almost noontime on Monday, almost twelve hours after the outage began. Vodafone said:

"We had a break in last night at one of our technical facilities which resulted in damage done to some of our equipment. This means that some customers may be experiencing temporary loss of voice, SMS, and Internet services. We are working quickly to restore these and will be back to normal as soon as we can. There has been no impact on the privacy of customers' data. "

Meantime, an internal Vodafone memo was widely circulated on the Internet. It told much more than Vodafone's formal posting. The memo was cursory and stated:

"Vodafone Technology Incident Management Service Operations  
Incident Update  
Source Remedy Reference  
Incident

Service Affected 3G, 2G, SMS, Voice, Vodafone One Net - Voice, Paknet, Telephony,  
Vodafone.co.uk, BlackBerry Connect, Email, Network Mgt, Voicemail, Fixed Link (Voice),



Remote Access Service, MMS, Severity P1

Status Open Comms ID:

Start 28/02/11 00:40:00

Incident Statement: Link connectivity issues are being experienced to the Basingstoke Data Centre

Impact: Multiple services are impacted. Customers may experience problems making & receiving calls, sending and receiving text messages & establishing data sessions. War room invoked, conf. call ongoing to discuss action plan. Crisis Mgmt engaged.”

Not only was little information forthcoming from Vodafone, but reportedly Vodafone attempted to squelch speculative blog entries. One customer reported getting the following message from Vodafone:

“Hi,

We’ve removed five of your posts from our eForum today relating to the network outage.

The reason the posts were removed is because the information you’ve received is speculative and has not been confirmed. We are investigating this now and will provide more information as soon as it’s available.

It would be good if you could let us know who you received this message from although we understand if you choose not to.

Please do not re-post this information.

Thanks  
eForum Team”

To round things out, the following posting was found on Vodafone’s web site under Continuity Management:

“Keeping you connected if disaster strikes: Vodafone UK Achieves BS 25999 Business Continuity Certification of its 3G Voice and Mobile Broadband Networks.

Gives customers added confidence to include Vodafone’s network into their own business continuity plans.

Vodafone UK was the first mobile network operator globally to achieve BS 25999 and to have its 2G and 3G networks certified.”

## Lessons Learned

Mobile phone service is no longer just a convenience to keep in touch with family members and friends. It has become critical to the operation of many businesses. Many of the Internet posts complaining about the outage came from professionals who could not conduct their normal, everyday business activities because of the outage.

Not being able to communicate for most of the day is bad enough. But what seemed to really get people angry was the lack of communication from Vodafone. Customers did not know what was happening nor when to expect the restoration of mobile services. We have seen this in so many Never Again stories – a total lack of communication with the affected users. In response, many companies now post digital dashboards showing the status of their services and details on problems. Vodafone should definitely follow suit.

Other aspects of this incident also stand out. Where was the physical security for the building? Was there a guard on site? Was the site alarmed? Why did it take the police so long to arrive at the scene?

Furthermore, telephone networks are so reliable because they can automatically route around failures. If an exchange goes down, traffic is simply routed around it to other exchanges. Why could Vodafone not do this?

And where was Vodafone's business continuity plan? Surely, they had considered the recovery from a data-center failure. Or had they?

Speaking of business continuity plans, one final point is to be made. There were hundreds if not thousands of posted complaints from business people who could not conduct their normal business during the outage. Where were their business continuity plans? If you depend upon infrastructure such as telephone systems or the Internet, you must know that these systems are not 100% reliable. They will fail. What is your plan to continue your business activities in the event of a failure of a service that is critical to you?

## **Acknowledgements**

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Information for this article was taken from the following sources:

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