

INVESTING IN TELECOM

Turkey Enhances Emergency Response

ISTANBUL, THE ENGINE OF TURKEY'S ECONOMY and the home of 14 million people, lies along the border between Europe and Asia. It also lies along the North Anatolian Fault, which makes it highly susceptible to severe and potentially devastating earthquakes. Recognizing that Istanbul lacked sufficient resources to respond to such disasters, local leaders set out to design an emergency operations center with cutting-edge solutions.



In an effort to support its Turkish partners, USTDA brought a delegation of emergency response officials to the United States to visit three emergency operations centers, where they saw innovative technologies in operation. The delegates were able to exchange information with U.S. experts and to brainstorm about the next generations of technology. They knew that they needed to design a center with solutions that had not even hit the market yet.

Upon returning to Istanbul, that is exactly what they did — they built the state-of-the-art Hasdal Emergency Operations Center, which opened in 2014. On a recent trip to Turkey, USTDA's Director toured the Center, where staff demonstrated the utility of several U.S. solutions capable of delivering effective emergency response. From Dell servers to Motorola radios to Oracle software, more than 70% of the Hasdal Center is outfitted with U.S. technologies.

The staff indicated that they chose these technologies because they knew they could not take risks with emergency operations, since failure presented a matter of life and death. From their perspective, it was not only that the U.S. products were in many cases the best on the market, it was also that the U.S. companies committed to long-term service. They needed to have the confidence that the technologies they purchased would remain operational, but they also needed to know that they had reliable partners to call upon if need be. They issued a competitive international tender designed to attract top-of-the-line solutions, which allowed them to identify and select U.S. goods and services that met their needs.

Today, the Hasdal Center plays a number of important roles in the community. Its staff is responsible for educating the public on how to prepare for and respond to emergencies. They study the risk to public structures during earthquakes and conduct assessments on retrofitting or reconstructing buildings in Istanbul. They also perform risk appraisals of cultural heritage sites, which is important in a city so rich with history.

While it may be impossible to prevent natural disasters, it is possible to improve the response to them. Istanbul has made important progress toward this goal by establishing the Hasdal Emergency Operations Center, and USTDA is proud to have helped lay the groundwork for its development.



Following a USTDA reverse trade mission to the United States, Turkish officials built the state-of-the-art Hasdal Emergency Operations Center. From Dell servers to Motorola radios to Oracle software, more than 70% of the Center is outfitted with U.S. technologies that can help them deliver effective emergency response.

CONNECTING THE WORLD

Telecommunications infrastructure serves as the backbone for advanced economic development in emerging economies. Access to telecommunications services has increased dramatically over the past decade: 5.2 billion of the world's 7 billion mobile subscribers live in developing and middle-income countries. Internet connectivity in these countries has gone from 6.5% to over 30% of the population. Fixed broadband subscriptions have increased from 50 million to 359 million.

With populations that are increasingly connected, public and private sector stakeholders in emerging economies are seeking ways to provide services using these platforms. They are also using telecommunications

tools to increase the effectiveness and interconnectivity of other infrastructure investments in transportation, energy and healthcare. At the same time, expanded network usage by individuals, businesses and service providers necessitates greater availability of data storage and cloud services, including cybersecurity infrastructure that can respond to evolving threats.

U.S. companies provide telecommunications solutions that increase access, manage and secure data, and facilitate improvements in transportation and energy infrastructure. USTDA helps position U.S. firms to supply advanced technologies and services to emerging markets that are developing modern telecommunications infrastructure.

BUILDING SMART, SUSTAINABLE CITIES

Almost every aspect of advanced infrastructure development includes telecommunications. As many emerging markets are experiencing unprecedented population growth and rapid urbanization, they are focused increasingly on deploying telecom tools to develop smarter, more sustainable cities. USTDA has been at the forefront of these efforts during the past fiscal year.

Several of the Agency's partners have made prior investments in "intelligent" solutions for transportation, energy and e-citizen services. But they have begun to realize that the key to a truly "smart" city — one with increased efficiency and engaged citizens — is integration. For example, USTDA is supporting the City of Istanbul's efforts to invest in big data solutions that will help them integrate their IT infrastructure. Istanbul already has a strong foundation of enhanced services but, as its population is expected to surpass the largest European cities by 2020, it is important to prepare for continued growth — and to meet the expectations of an increasingly interactive population. USTDA's grant provides the support necessary to help

Istanbul improve city operations, enhance disaster management and provide reliable public services.

The Agency is also leading the U.S. government's efforts to connect U.S. industry to India's plans to build 100 smart cities. USTDA is uniquely positioned to advance this initiative, as the Agency's crosscutting experience can be leveraged to deliver technical assistance and to pilot technologies that will help India develop cities that are cleaner, more efficient and have a lower carbon impact. To support these objectives, USTDA this past year signed agreements to help three Indian state governments develop smart cities utilizing U.S. industry expertise and solutions.



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