



## Pursaklar



### Challenges:

- Extreme weather conditions causing network interference
- Residential buildings creating obstacles, leading to unreliable connectivity
- To reliably provide high-capacity voice, data and cloud services to customers
- Network bandwidth of at least 70 Mbps in extreme and hostile climate

### Solutions used:

- InfiLINK 2x2 R5000-Xm
- InfiMAN 2x2 R5000-Mmbs
- InfiMAN 2x2 R5000-Smnc-50 Mbps
- InfiMAN 2x2 R5000-Smnc-300 Mbps

### Benefits:

- Quick and easy installation
- NLOS capabilities for built-up areas
- Achieves capacity of up to 240 Mbps per sector
- Flexible frequency planning and powerful interference mitigation tools
- Advanced QoS features
- Fully scalable network
- Improved productivity
- Customers can now use voice, data and cloud services reliably with no disruption
- Fast, reliable communications for thousands of citizens
- City-wide connectivity
- Reduced Government time and resources spent on fixing networks when damaged by weather

## InfiNet Wireless makes city-like speeds a reality in Turkish town

Pursaklar is one of the oldest towns in the Ankara province, the cosmopolitan capital of Turkey. Self-proclaimed as the 'City of Smiles', Pursaklar dates back to 1463 and is home to around 142,000 people.

As in any urban area, high-speed, reliable Internet is a must for businesses and residents alike. Over time, the Pursaklar authorities had become increasingly aware that they were struggling to provide residents with a fast, non-interrupted connection that provided a similar experience to what they would get in the city of Ankara.

People often experienced disruptions to their connectivity and low response times due to the ever-changing weather conditions. The numerous obstructions in the built-up areas of the town also blocked legacy wireless connections, causing poor signal and 'dead zones' and rendering any high-speed network technology such as 4G practically useless.

To transform their communications network into a state-of-the-art infrastructure capable of delivering reliable and high capacity broadband for cloud, voice and data services, the Pursaklar authorities approached Radio Teknoloji Hizmetleri A.Ş, a specialist in delivering solutions for wireless networks.

After a rigorous testing process, with no other products in the marketplace meeting and exceeding the customer's demands, Radio Teknoloji selected InfiNet Wireless as its strategic technology partner. Together, the companies first gained a full understanding of the issues the authority of Pursaklar was faced with. Following various meetings and a rigorous proof of concept, a wireless broadband network was deployed to meet the backhauling needs of all types of enterprises. This new network was based on InfiNet Wireless' well-proven Point-to-Point family of solutions, the InfiLINK 2x2.

Designed specifically for high-density wireless internet service provider (WISP) applications for Non-Line-of-Sight (NLOS) connectivity in urban environments, InfiNet Wireless also provided its Point-to-Multipoint (PMP) base stations in multiple strategic locations to connect the remote subscribers to the core network. This selected high-capacity wireless solution negated the need for fibre optic cabling completely. The entire network was configured and implemented in just seven days, bringing much-improved connectivity to Pursaklar almost instantly.

This new wireless platform has significantly increased the district's total available capacity and its NLOS capabilities have enabled it to not only make more services available in built-up locations but to also guarantee better coverage of the town and a reliable performance 24/7 – even in challenging weather conditions. Shortly after the installation, InfiNet Wireless' weather-proof credentials were put to the test after heavy snowfall saw temperatures drop to as low as -20°. Despite these challenging conditions, the entire province remained connected.

Prior to the deployment of the InfiNet platform, Pursaklar was paying huge monthly fees to its legacy service provider to achieve a mere 10Mbps connectivity. Since deploying the InfiNet solutions, it has reported a major increase of speeds of up to 450Mbps. The pay-as-you-grow nature of the network also means it is future-proofed against rising demand for its services.

*"We are elated with the reliable and secure network connectivity that InfiNet Wireless and Radio Teknoloji have provided us," said **Yaşar Kurtyemez**, IT Manager at Pursaklar District Municipality. "Due to the adverse weather conditions and large building obstacles, our previous infrastructure had become unfit-for-purpose; it could not meet demand and was unreliable. We tried numerous solutions but ultimately needed a reliable and high capacity platform – which is exactly what we got with InfiNet. Since the deployment of our new network, the connectivity has been robust, with no outages encountered, and we have also received overwhelmingly positive feedback from our customers. We are pleased to have an efficient and functioning infrastructure which keeps on running perfectly even in adverse weather conditions. I cannot thank the teams enough."*

