

Applications

High Capacity MW for video, voice & data

A guide through examples of practical cases of possible
different network configurations

Mobile and Fixed wireless connectivity

Skylinks digital Microwave Systems represent the most reliable and flexible solution for any demanding services in broadcasting distribution links.

Product availability includes:

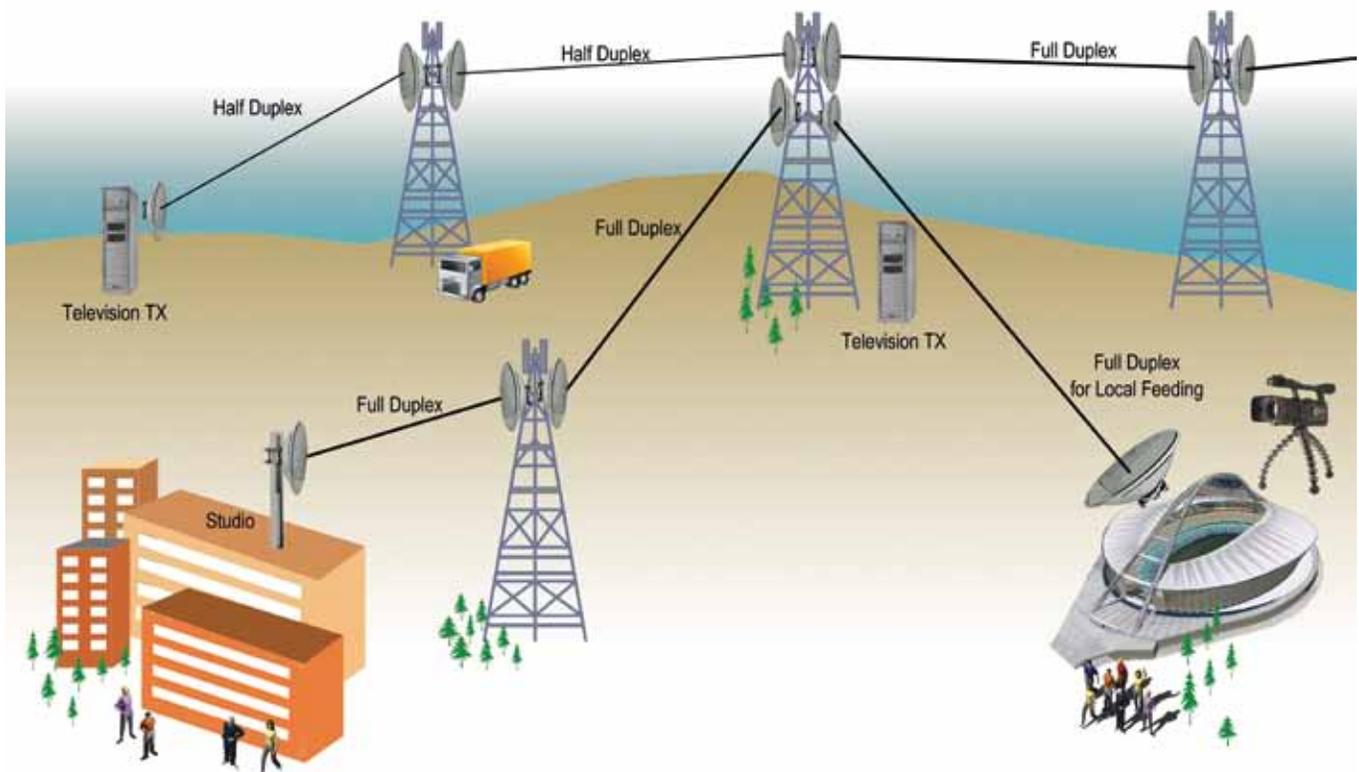
- Mid/high capacity Mobile connections for video contributions from event sites for reaching the TV distribution network; COFDM modulation allows NON-LINE-OF-SITE connectivity.
- High/very high capacity Fixed backbone Microwave Links for transportation of the aggregated MUX contents to Television Transmitters Network.

The Microwave Links support 6/12/24 DVB-T MUXs or 3/6/12 DVB-T2 MUXs, depending on the configuration over the air. Systems can be redundant and guarantee prioritized services.

SkyLinks product lines offer wide range of Split-Mount and All-Indoor equipments, with AC or DC power supply options.

Furthermore, the Split-Mount Radios are available in standard or High TX output power, whereas Indoor Solutions are available in very High and Ultra High TX output power level.

The combination of the High Linearity of transmitter and QAM modulation schemes, assuring superb spectral efficiency, performs 99,999% link availability.



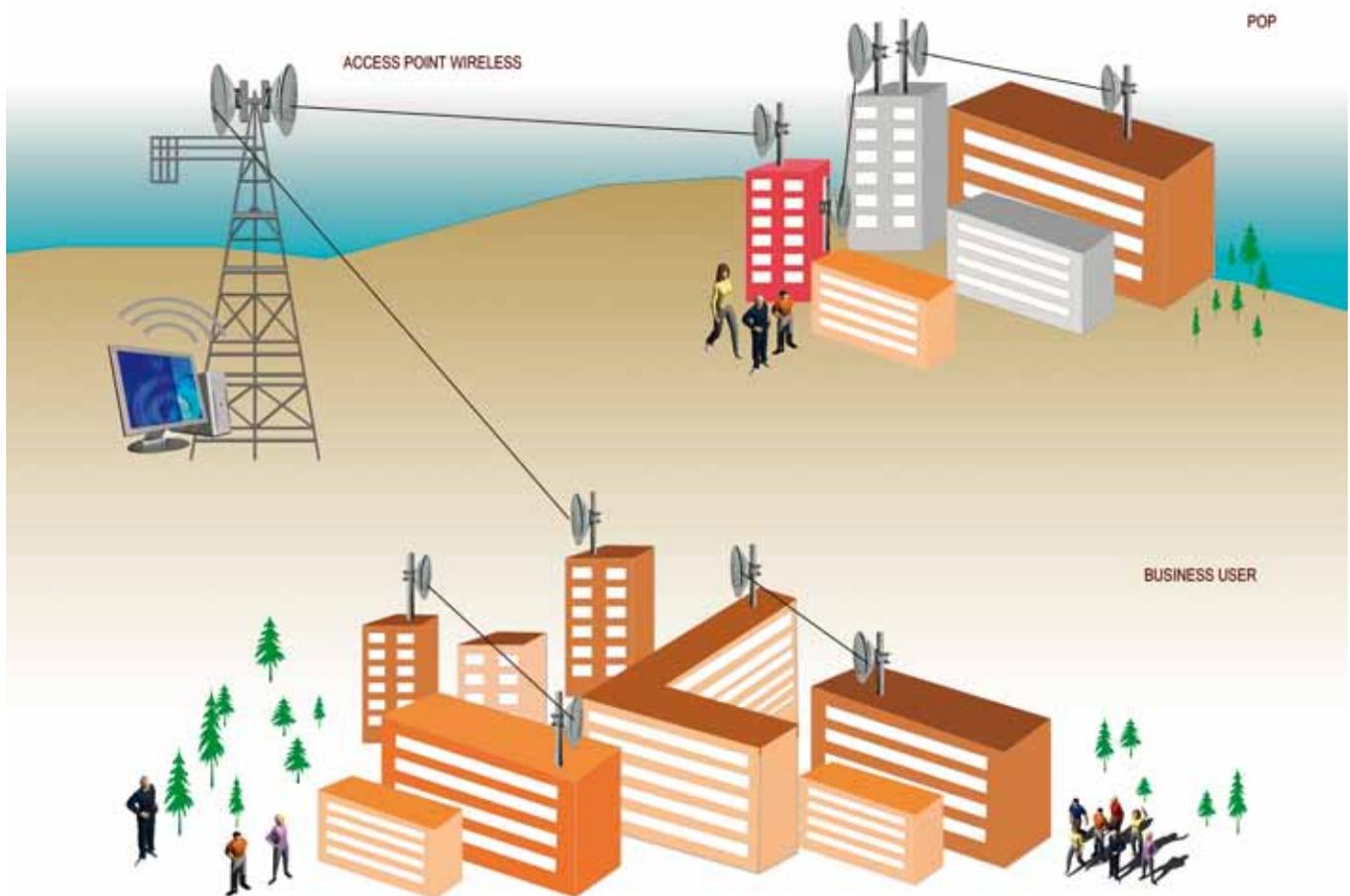
Internet Service Providers / Wireless Internet Service Provider

The SkyLinks' radio system HS-LINK/ISM, now available in the split-mount IDU+ODU solution (but very soon in the more compact & cost-effective full-outdoor layout) operates in the ETSI and FCC licensed frequency bands for high capacity Gigabit Ethernet backhauling up to 310 Mbps and in the ISM licence-exempt sub-bands at 17GHz and 24GHz (with a very efficient cross-polarized solution).

This last solution represent the ideal alternative to WI-FI 5GHz Hyperlan bridging equipments for smaller capacity (up to 200Mbps in a 40MHz RF channel) for national or local ISP/WISP operators in all their needs for backbone of wireless access IP, DSL or WiMax applications.

A specific version at 43GHz for backbones of WiMAX access points in the UK market is available on request.

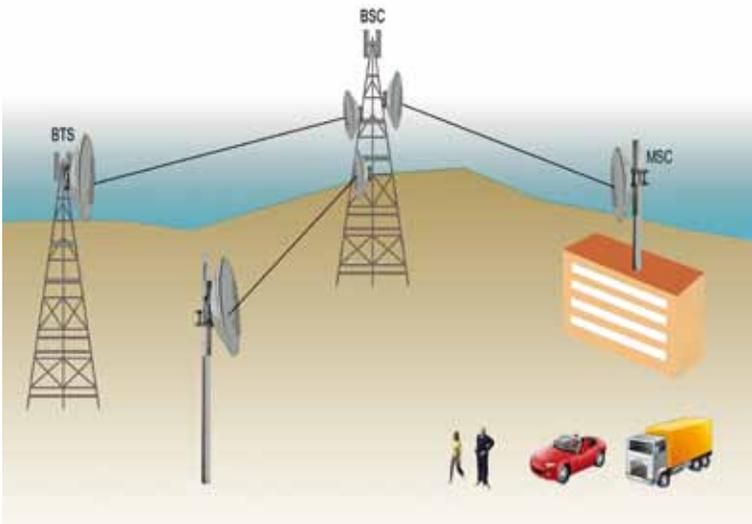
Last mile connections, point to point and IP networking are all best applications for the IP radio HS-LINK, available also at the 5.4-5.8GHz sub-band.



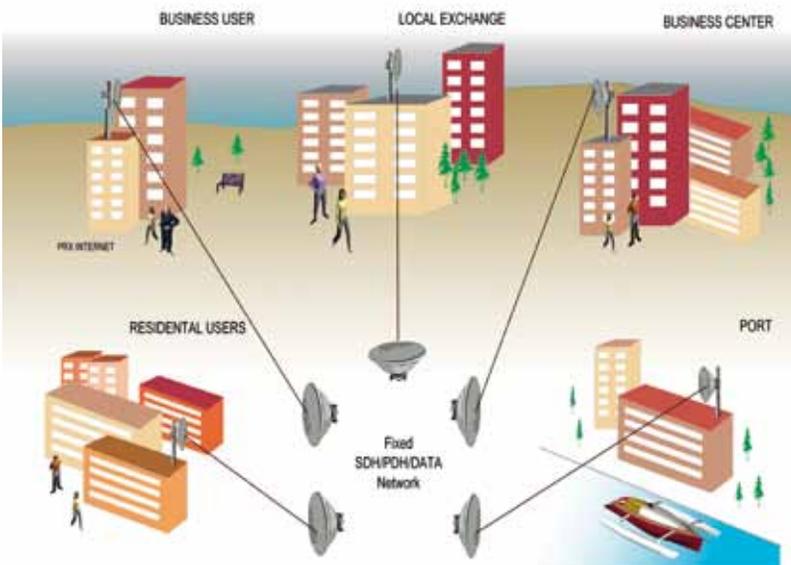
Mobile and Fixed Telecom network infrastructures.

SkyLinks Digital Radio System DRS has been designed to meet any possible configurations need of 3G and 4G mobile networks. The product features allow operators to tailor the transmission network according to the widest range of different topology requirements, with a solution offering a combination of E1/T1 lines from 2 to 63 and scalable Ethernet, either up to 155Mbps in the standard version or to 310Mbps using the Wide Band option. Aggregated 4+0 configurations available for Gigabit Ethernet capacity up to 900Mbps.

SkyLinks DRS product line is the perfect solution for the convergence into Ethernet of modern network deployments for WiMax and LTE connectivity, and keeps an open eye on more traditional interfaces like E1 and STM1 both Electrical and Optical.



One of the most actual applications in fixed transmission network is the backup of main Fibre Optic lines or integration of combined solutions where the installation of the fibre is not possible or economically not recommended, assuring CAPEX and OPEX savings.

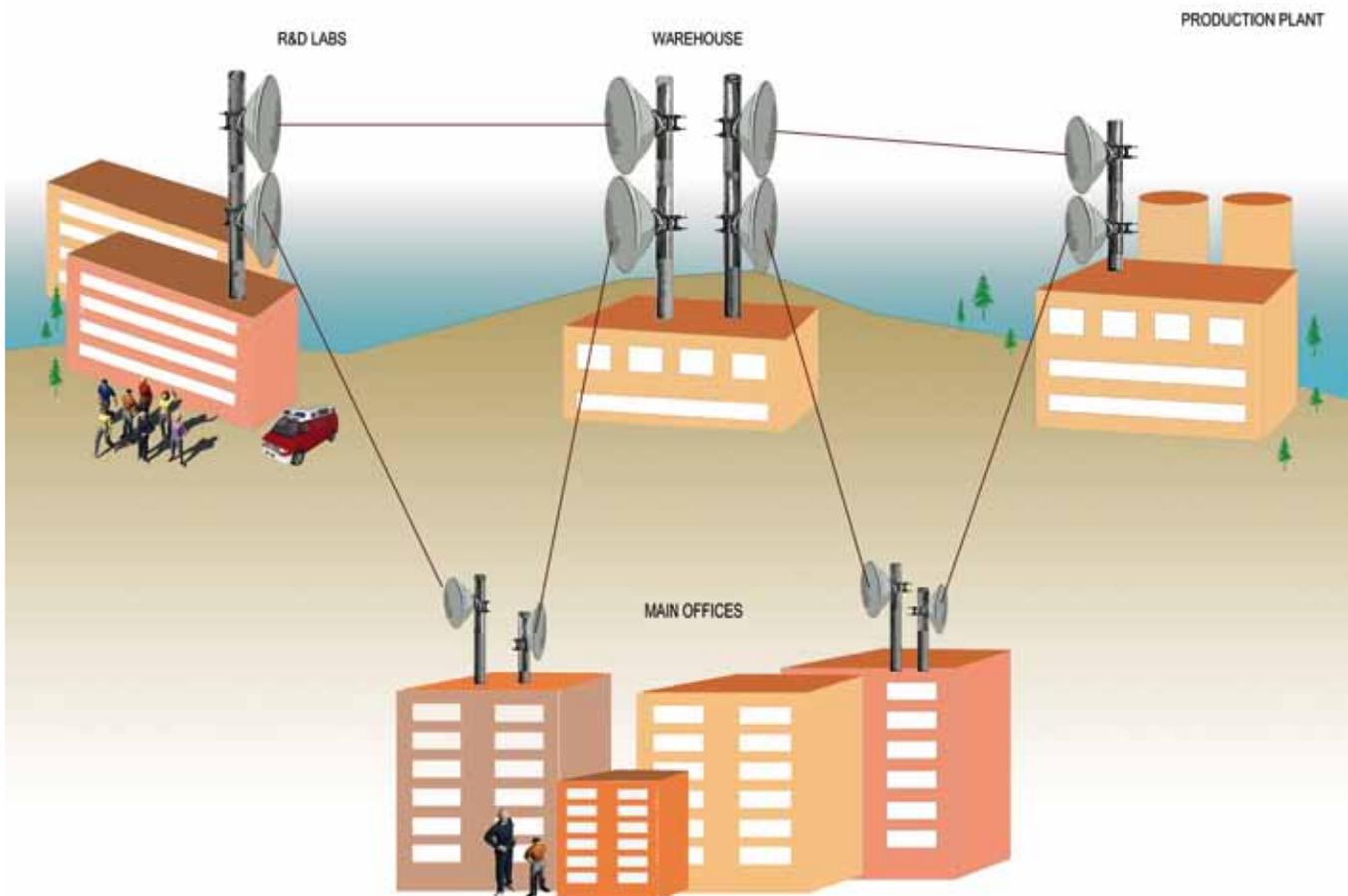


Enterprise network solution

SkyLinks offers a range of Digital Microwave Radio based telecommunication services to private Enterprises and Business Companies where the use of IT/IS applications is basic.

Increasing demand of corporate communications for data transport between the main offices and warehouses, remote R&D labs or subsidiary production plants is often more convenient to be realized through a fully owned wireless network rather than through leased lines, that are usually very expensive, un-secure and limited in speed rate.

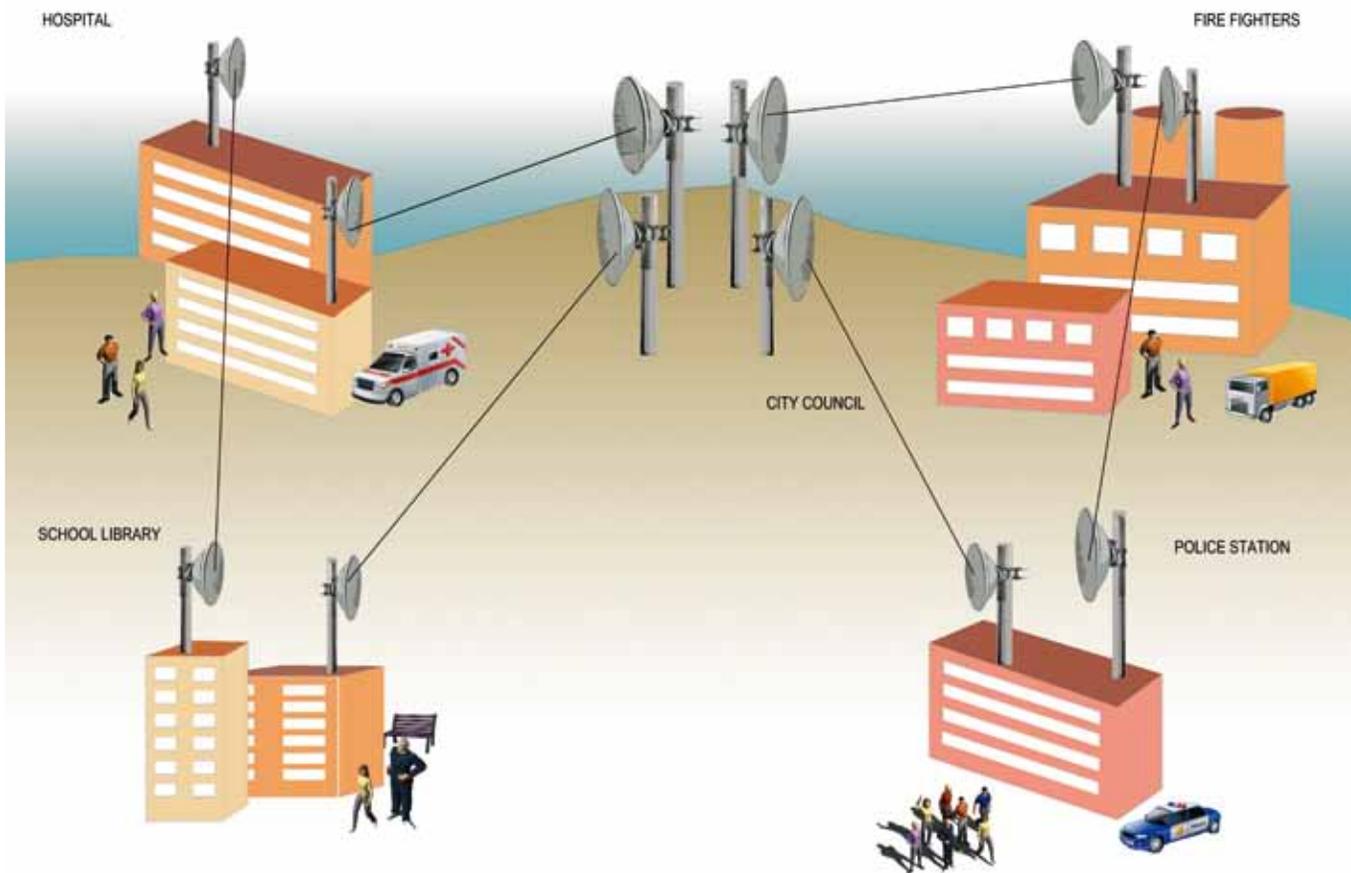
LAN extensions, VOIP and intranet requirements are easily guaranteed thanks to the IP wireless network solutions offered by SkyLinks



Municipal network solution

Skylinks IP based MW radio solutions provide local government with data and voice communication services for 100% owned network systems allowing different buildings to be safely connected.

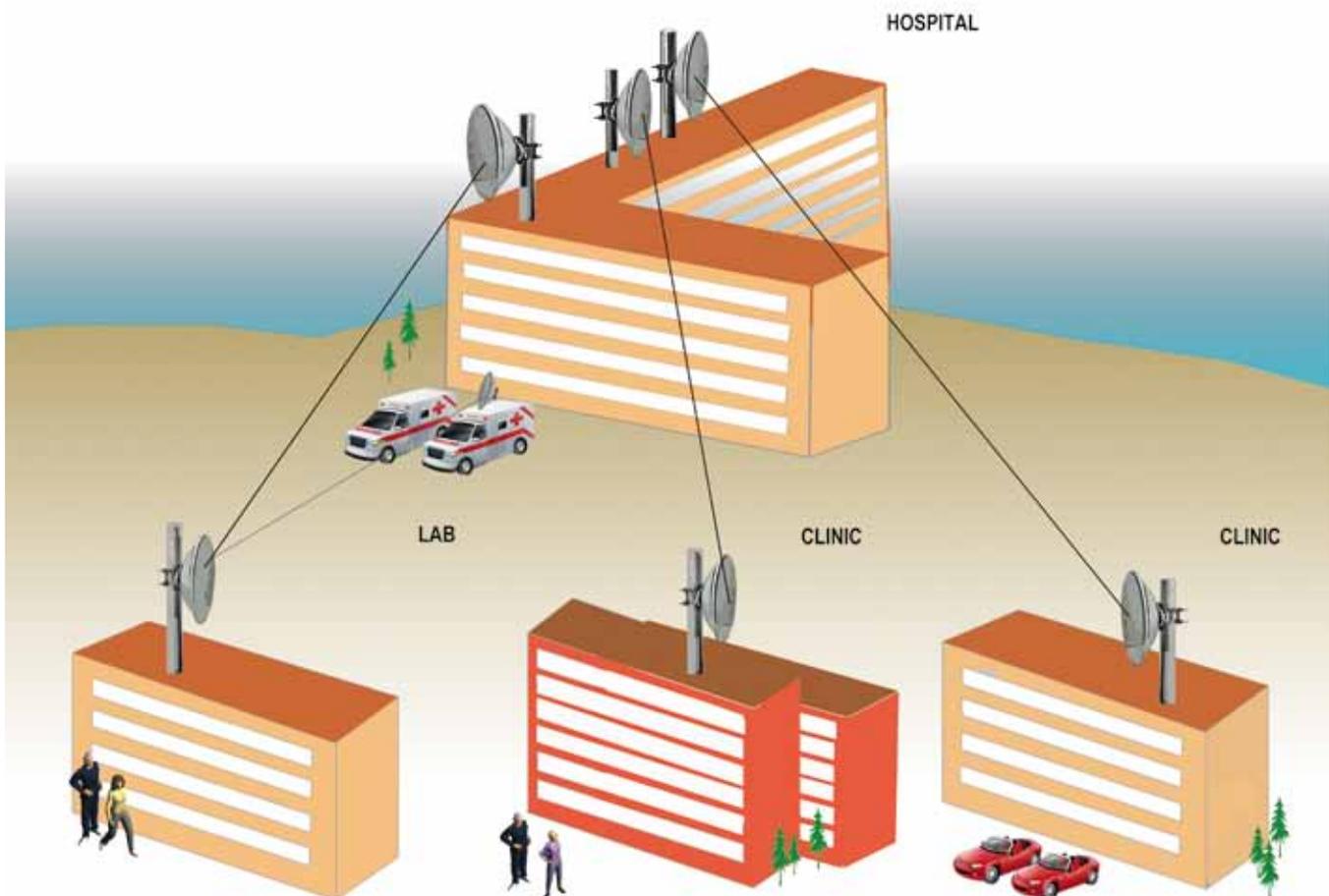
The main Municipal database centre can be accessed by remote institutional offices through a variety of E1/E3 lines or Ethernet connections up to over 600 Mbps Gigabit Ethernet.



Healthcare private network

One of the most important applications of IP based digital microwave systems is represented by the connection between buildings in hospital complexes and from the main electronic archive to remote laboratories and specialist health checking points.

Skylinks also offers mobile solutions for connection of ambulances or temporary first aid installations to the institutional healthcare network, for connection of digital instruments or data/voice over IP communications.



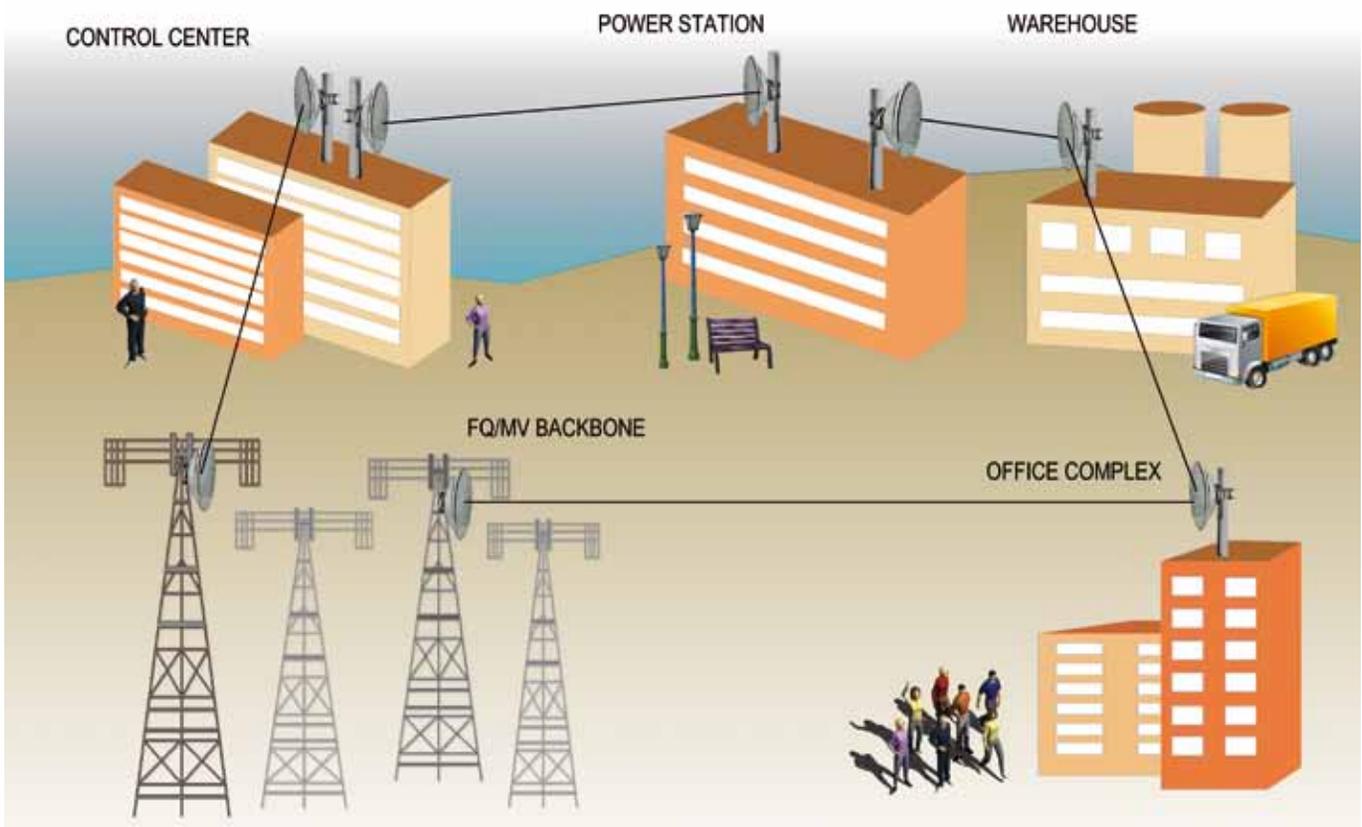
Utility networks

SkyLinks microwave radio systems are successfully used in the networks of utility companies in the electric (also smart grid infrastructure) and other sectors.

Available capacity options (4–622 Mbps) in conjunction with multiple types of interfaces (Fast Ethernet, Gigabit, V.35 and E1, STM-1) provide these companies with data and voice services.

Skylinks products fulfil the requirement of Utility/Energy providers for wireless networking systems running parallel to the distribution lines for carrying telemetry and other critical information in addition to data and voice communication internal services.

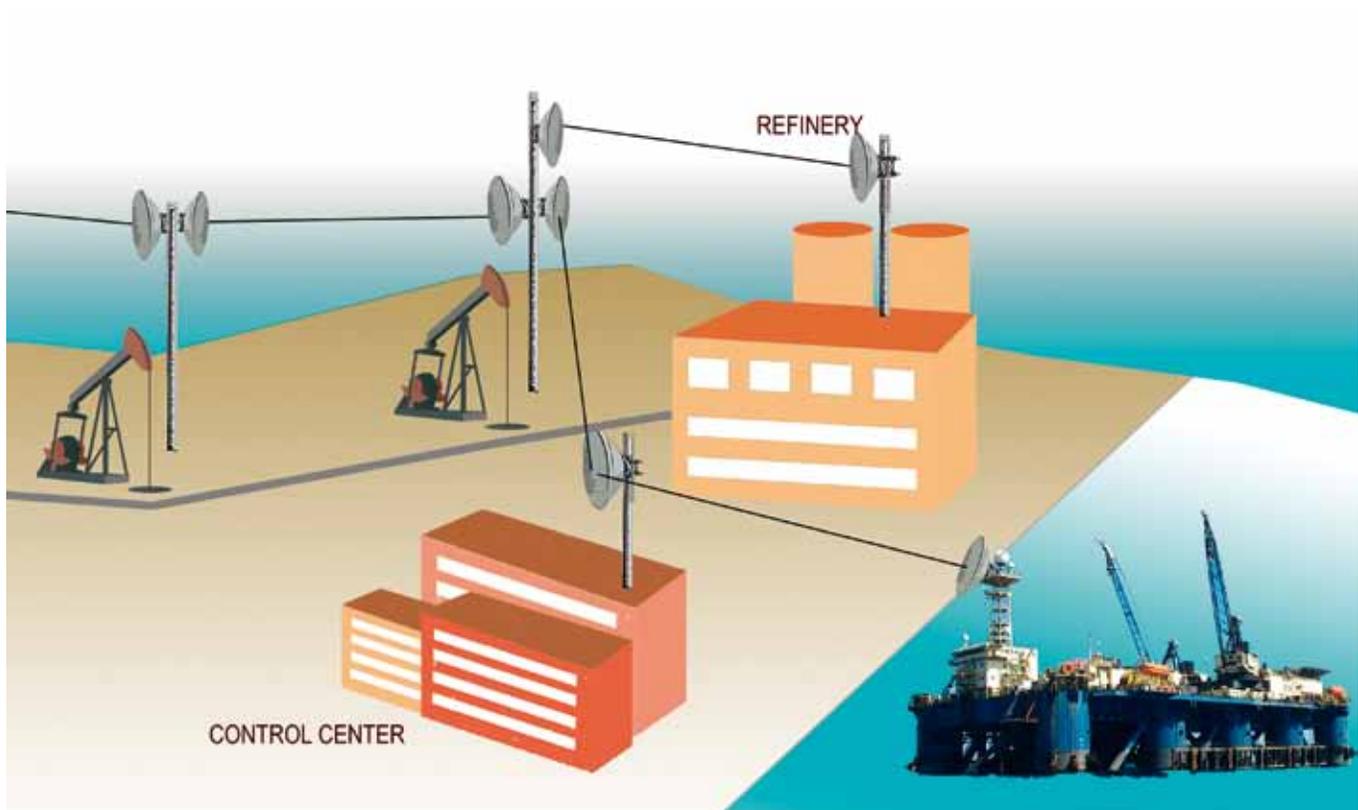
Thanks to the Full-Indoor very and ultra high power HS/All-in-One systems, Skylinks provides unmatched solutions in terms of distance coverable by a single run (over 100 Km. with 99,99% availability).



Pipelines control

One of the historic application of microwave links is the connection between sea oil platforms to the mainland refineries. Skylinks equipment had been widely used for this purpose.

Pipeline networks typically use fiber optic connections between the control center and the distribution sites were digital microwave links actually find application for back systems or repeaters.



Video surveillance

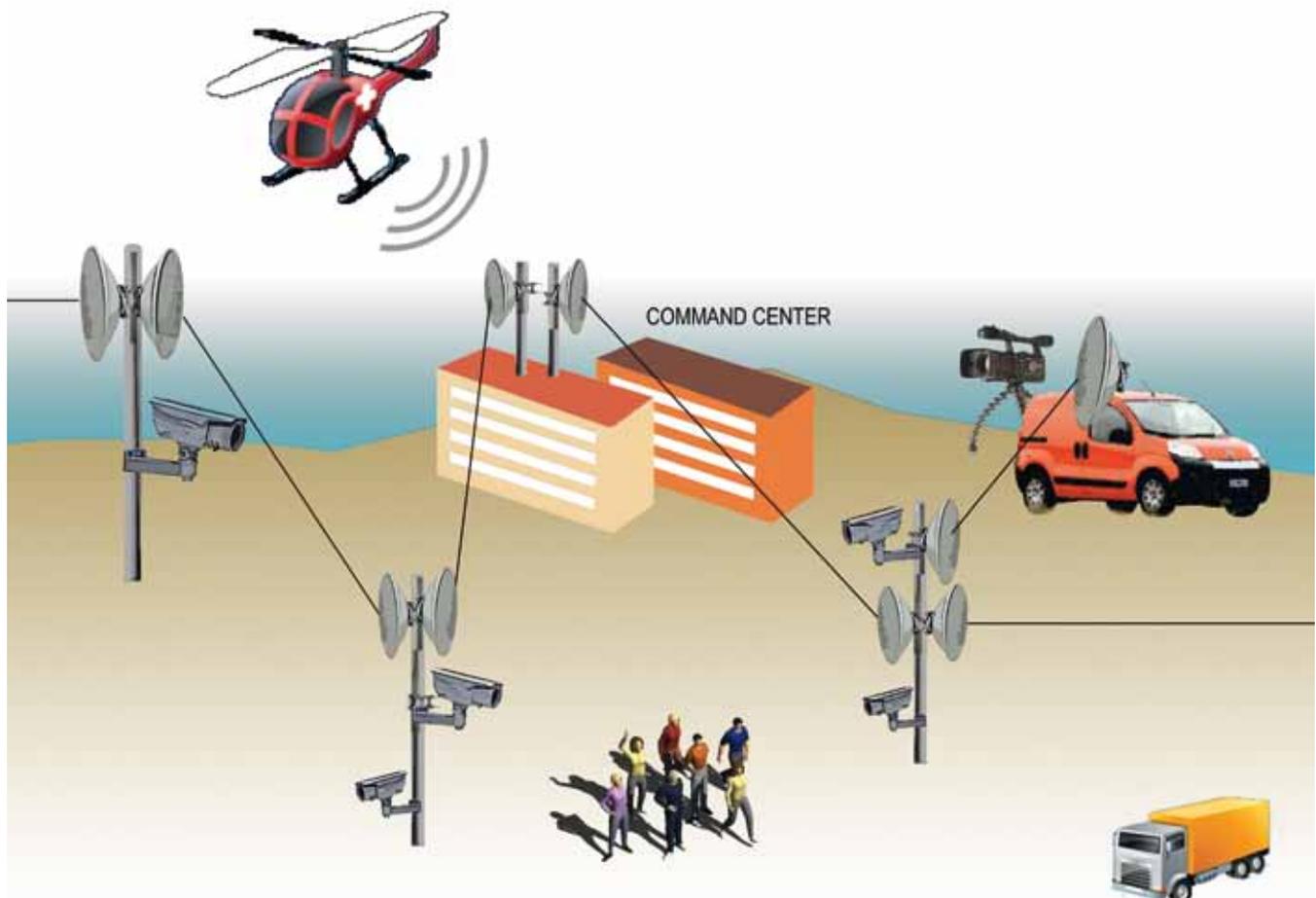
Thanks to the expertise in broadcasting of the parent Company SSBT, SkyLink can offer the best video surveillance solutions both for fixed and mobile application, including downlink for aircraft/helicopters.

Digital camera sources or analog MPEG2/4 SD or HD signals specifically converted with encoders/decoders, can be easily interfaced via ASI or Fast Ethernet port and distributed through the Digital Microwave network to reach remote controlling sites and or storage servers rooms.

SkyLinks mobile systems find application in all kind of situation where fast deployment is a must.

Emergency communications are one of the top priority needs in case of disasters like earthquake, tsunami and many other natural events where standard telecommunications channel are destroyed or temporary out of order.

It is proven that the good result of first aid activities in such areas is essential for limiting the number of victims, and communications are a topic issue that can be easily solved by using SkyLinks microwave solutions.



Disaster recovery

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