

It doesn't get more flexible than this:

Monitoring Unmanned Installations



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Monitoring from orbit: To monitor the safety and operation/functionality of unmanned installations, an innovative approach has been taken at the Ludwigshafen industrial power plant, a subsidiary of MVV Energiedienstleistungen GmbH. Via satellite communication system from EuroSkyPark (ESP), images from a video monitoring system at the waterworks are sent to the control center at the power plant. With great success. The pilot project can set a precedent.

When water is needed for industrial processes at the Giulini Industrial Park in Ludwigshafen, Rhine water is used for this purpose. The site's supplier – MVV Energiedienstleistungen GmbH with its subsidiary, Industriekraftwerk Ludwigshafen – operates a waterworks at the end of the Kaiserwörth container port about a kilometer away from the industrial park specifically for this purpose. Four large pumps roar in the depths of the building far below the water's

surface, pumping up to 1,000 cubic meters of water per hour. It is used, for example, to cool the power plant or in processed form for the chemical industry.

Even if drinking water quality is not required here: Heavy pollution, such as that caused by a shipwreck, damages pumps and the water treatment plant. Waterworks and harbor basins, as well as the pumps themselves, must therefore be constantly monitored

so that pumping can be stopped immediately in an emergency. This task has recently been solved at the Ludwigshafen industrial power plant with the help of a modern satellite communication system from EuroSkyPark GmbH. After all, once in orbit and back is the easiest way to ensure reliable monitoring.

"In the past, we handled monitoring via leased line," says Maik Thum, Managing Director of the Ludwigshafen industrial power plant, explaining the history. "But Telekom discontinued this line of business, and so we were forced to look for a new solution. Compared to the alternatives, such as leased lines, GSM or directional radio, satellite communication performed very well in terms of cost-effectiveness, flexibility and security." The question at MVV Energiedienstleistungen was: Does the ESP system really meet the high demands that utility companies have to place on their networks in order to reliably fulfill their supply mandate? Maik Thum was confident and ready to launch a pilot project. In doing so, he is taking on a pioneering role for the group of companies. After all, the demand for systems for metering data acquisition, monitoring or control is great and constantly increasing. MVV Energiedienstleistungen GmbH has grown rapidly over the past ten years. With energy contracting, the subgroup operates a decentralized business in which new plants have to be integrated time and again. "The ESP system offers us exactly this flexibility, which we need when expanding the service concept of the individual companies and locations," knows Maik Thum.

"What we are testing here in the pilot project, we can very usefully transfer to other sister companies."

"That is precisely the advantage of our system," confirms Jürgen Luckas, project manager at ESP. "We can integrate new systems here at the push of a button and monitor decentralized plants centrally. It couldn't be simpler or more flexible. We are offering a system here that can grow with us." ESP is also satisfied that a highly demanding customer is putting the technology through its paces here. "We're proving the quality and reliability of our satellite communications – and in the high bandwidths required to transmit images." It is precisely in the areas of plant monitoring and security that the decision-makers at ESP GmbH and its shareholder VSE NET see an important future market. "With the ESP system, all bandwidths are feasible. As a result, we see excellent market opportunities in property protection in addition to the classic business areas such as measurement, control and regulation," comments Michael Leiding, Managing Director of VSE NET.

Meanwhile, the technicians in the control room at the industrial park site look at a large monitor hanging from the ceiling. It shows the Kaiserwörth harbor with its piers and the pumping station inside the waterworks: "Everything's okay out there."

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