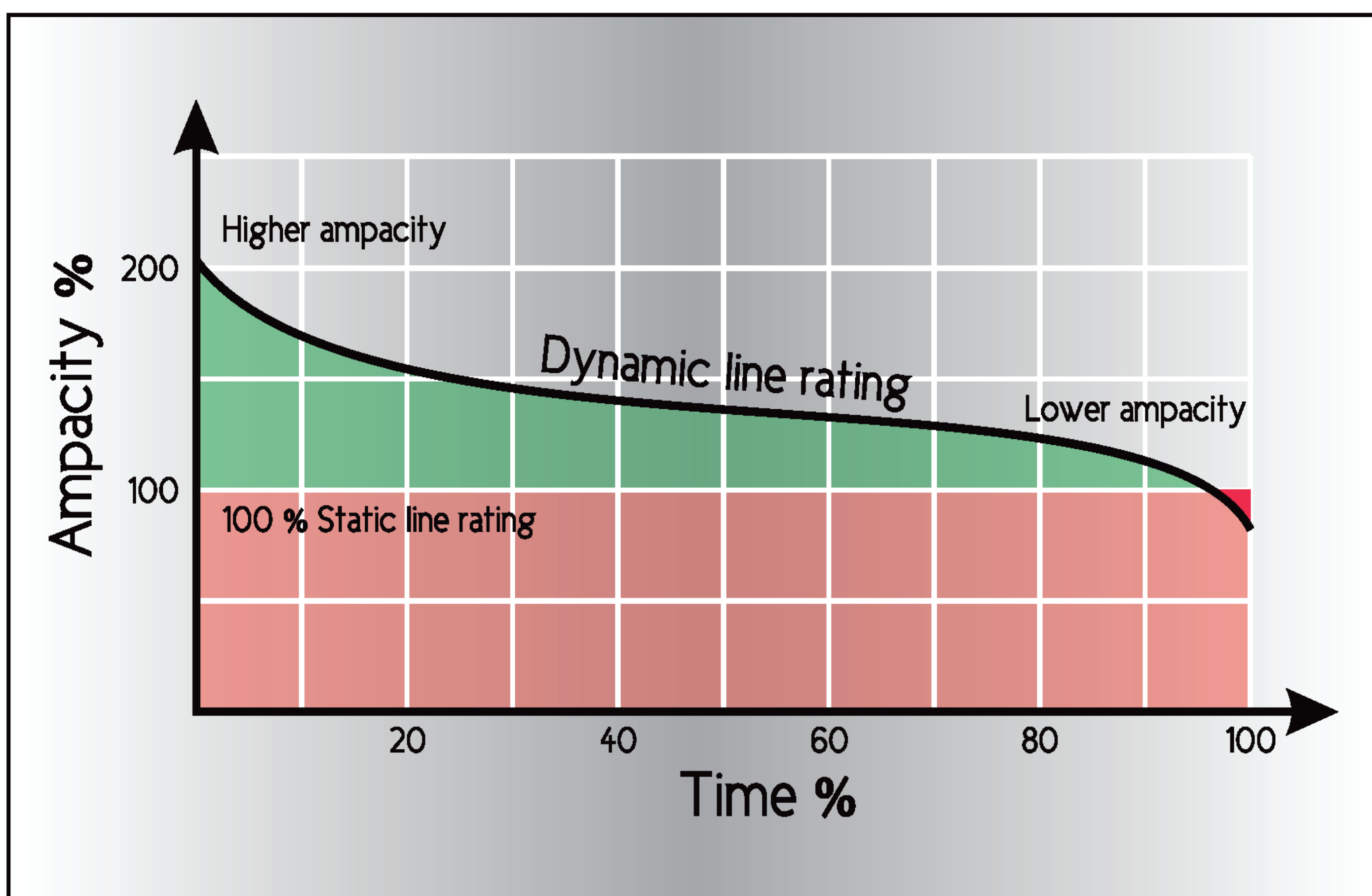


Overhead transmission line monitoring system in Croatian power grid

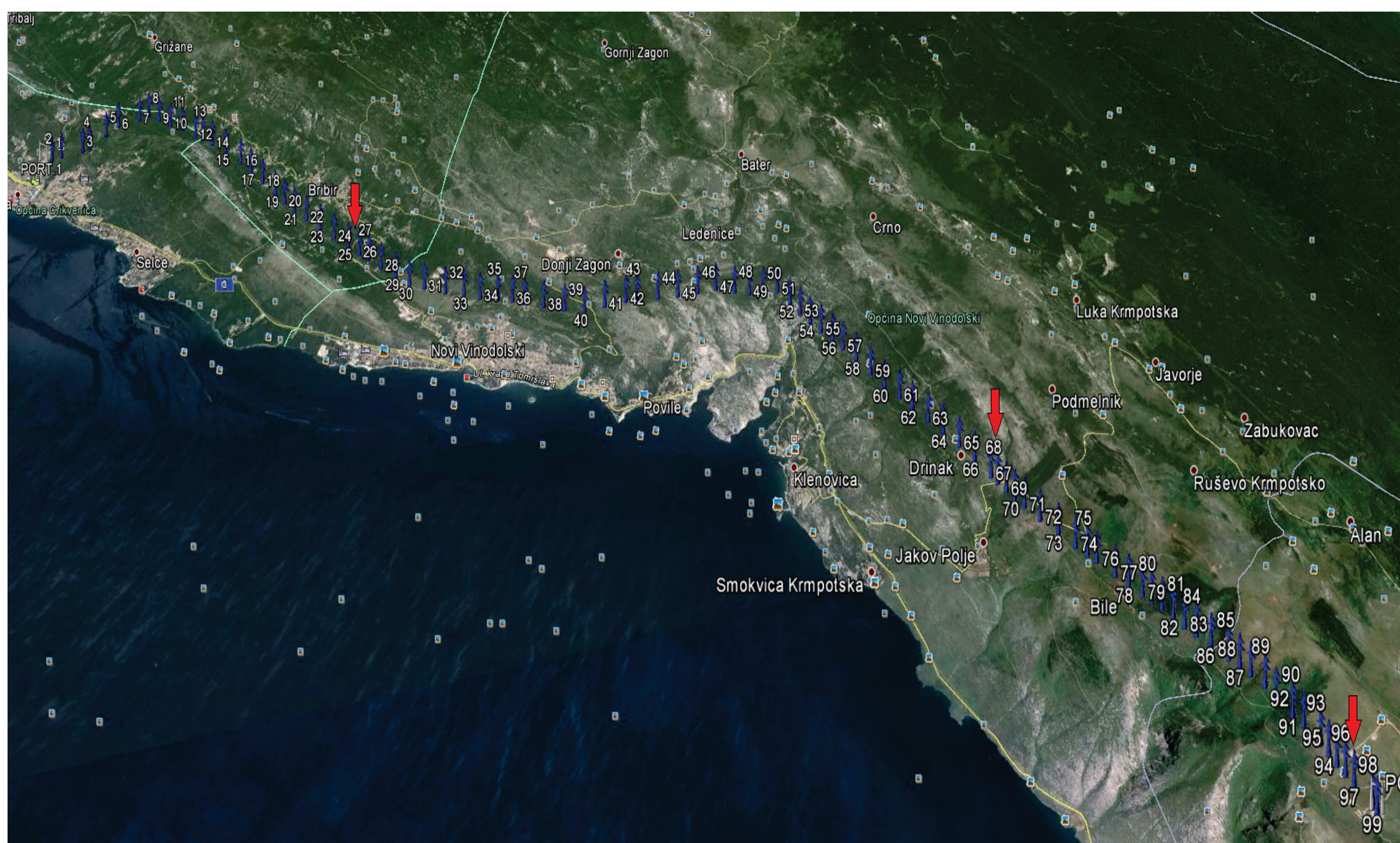
KLOBAS, Z., LOVRENČIČ, V., RUBEŠA, R., VALENTIĆ, V., JARC, M.

Putting the transmission network in the service of the electricity market causes a large energy flow in certain transmission directions. The key technical question is how much time will transmission network tolerate this situation without damage. In this case, for the system operator, very helpful information is the actual thermal loading of the conductor in normal and emergency state for re-dispatching energy. This can be achieved with OTLM system.



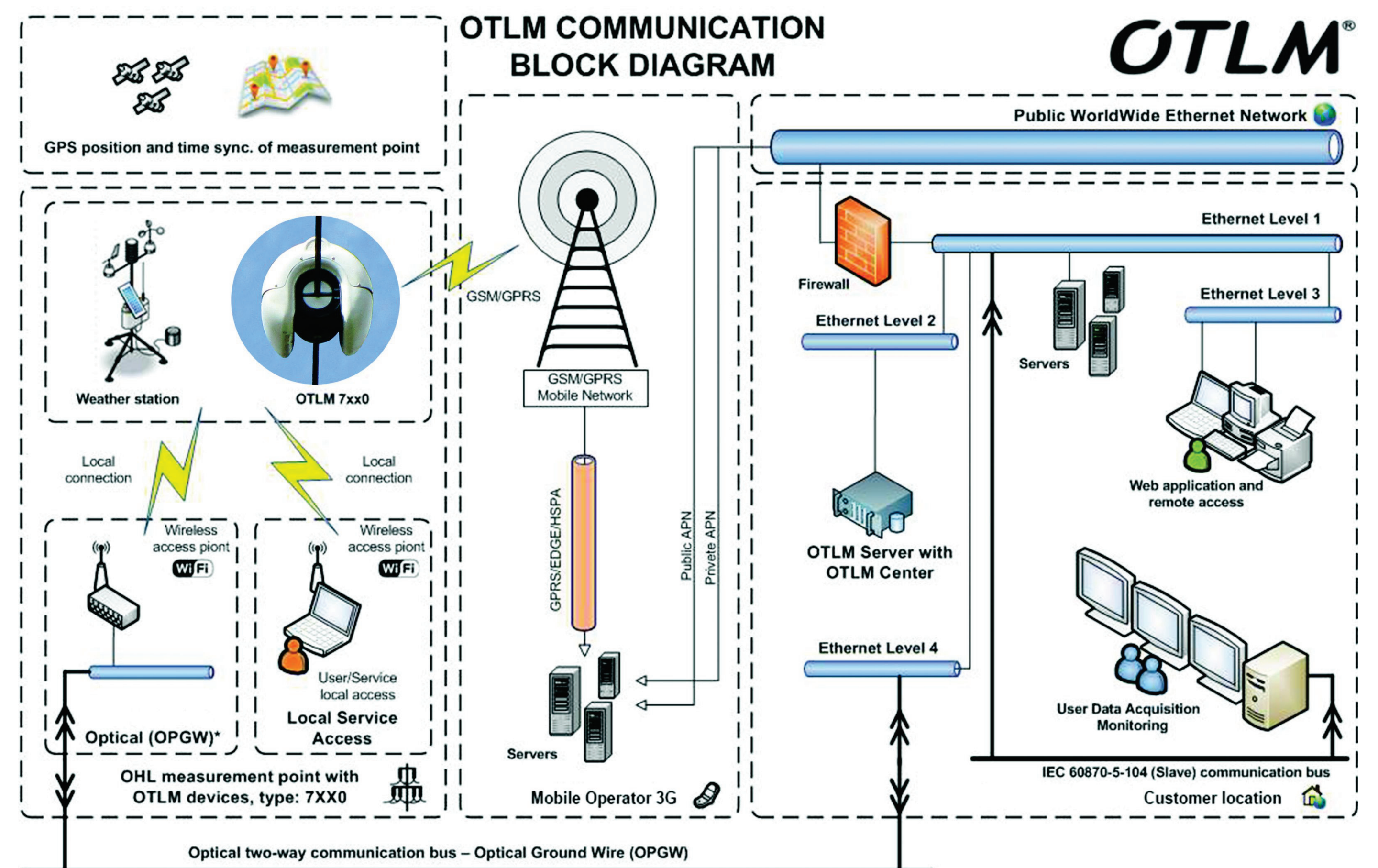
THE 110 kV OVERHEAD POWER LINE CRIKVENICA – VRATARUŠA

The line was created after interpolation of a wind farm (WF) Vrataruša of 42MW in the existing OHL Crikvenica – Senj at the beginning of 2010. The operation of WF Vrataruša at full power, in some cases, may require a change in network topology. The problem of safe energy transfer was attempted to be solved by using the **Overhead Transmission Line Monitoring (OTLM) system**.



THE OVERHEAD TRANSMISSION LINE MONITORING SYSTEM (OTLM)

OTLM is a system solution for monitoring and rating your existing and new OHLs based on real-time monitoring of conductor temperature, sag, load, and weather conditions.



OTLM System benefits: ampacity, direct measurement of temperature, current and sag, lightweight, easy installation, installation of the OTLM on any diameter of OHL, user friendly software, connection to SCADA or other system with standardized IEC protocol, GPS position, two-stage alarm sending interval, triggered by temperature of the conductor ($T >$ and $T >>$), multiple communication protocol and data logging.

