

## **TMN HD: Web and GIS based integral network management system**

**V. Sidorenco, V. Ciclicci, S. Dolenco, R. Dorogan**

<https://doi.org/10.1109/ICIL.2001.983583>

### **Abstract**

The paper describes the architecture of a wide area telecommunications management network (TMN) and system (TMS) RomTMN HD that are developed by specialists from the Technical University of Moldova and Systemcomputer Ltd. for Direction of Telecommunications of Romtelecom (Hunedoara County, Romania). Core modules of RomTMN HD are implemented on the basis of the original geoinformation model of telecommunications systems. The architecture of the TMN and TMS is based on the M series of ITU-T Recommendations and uses modern concepts of implementation of distributed objects management like distributed component object model (DCOM), and Web based enterprise management and geoinformation systems (WBEM). RomTMN HD being an automated and integrated management system is capable of improving all complex set of processes of coordination of resources necessary for supervision, monitoring, projection, simulation, generation, implementation, analysis, measurement and testing of telecommunications networks in order to provide end users a high level of services, at adequate price and optimal distribution of capacity.

*Keywords: telecommunications management networks, automated management system, geographic information systems, telecommunication network management, computerized monitoring*

### **References**

1. The Telecommunications Management Solutions Newsletter. Fall", *Vertel*, pp. 8, 1998.  
[Google Scholar](#)
2. "ITU-T M-Series Recommendation M.3010 Principles for a Telecommunications Management Network. COM", 4-49-E, pp. 97, 1996.  
[Google Scholar](#)
3. V. Ciclicci, S. Dolenco and V. Sidorenco, "The Architecture of National Integrated Telecommunications Management System. Acta Academia", *Chisinau: Evrica 1998*, pp. 100-107, 1998.  
[Google Scholar](#)