



## **Best Practice for Rainfall Measurement, Torrential Flood Monitoring and Real Time Alerting System in Serbia**

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Serbia occupies 88.000 km<sup>2</sup> and its confined zone menaced with torrent flood occupies 50.000km<sup>2</sup>. Floods on large rivers and torrents are the most frequent natural disasters in Serbia. This is the result of a geographic position and relief of Serbia. Therefore, defense from these natural disasters has been institutionalized since the 19th century. Through its specialized bodies and public companies, the State organized defense from floods on large rivers and protection of international and other main roads.

The Topčiderska River is one of a number of rivers in Serbia that is a threat to both urban and rural environments. In this text, general characteristics of this river will be illustrated, as well as the historical natural hazards that have occurred in the part of Belgrade near Topčiderska River.

Belgrade is the capital of Serbia, its political, administrative and financial center, which means that there are significant financial capacities and human resources for investments in all sectors, and specially in the water resources sector.

Along the Topčiderska catchment there are many industrial, traffic and residential structures that are in danger of floods and flood protection is more difficult with rapid high flows.

The goal is to use monitoring on the Topčiderska River basin to set up a modern system for monitoring in real time and forecast of torrential floods.

This paper represents a system of remote detection and monitoring of torrential floods and rain measurements in real time on Topciderka river and ready for a quick response.