

**PROJECT / Radio coverage for
emergency communication systems to
operate under critical wildfire
environments TOOL**

RESCuE-TOOL

Main Objective:

In this research project, the study of radiowave propagation phenomena in the presence of wildfires, is proposed. Both experimental and theoretical approaches to examine and understand radio propagation in fire environments for various scenarios and fuel heaps that are problematic to radio communication will be examined and a new radio system planning will be studied and implemented in real case applications. Discussion and recommendations will be made concerning radio communication frequency selection and considerations for both SIRESP radio coverage and backhaul redundancy for the backhaul radio links of each base station, to operate in fire environments. This builds up on top of more than 20 years of extensive research work on attenuation in vegetation media by research team.

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