

Resilience of Critical Infrastructure to Cyber Attacks in the Western Balkan States



Aleksandar Bogićević , Sanela Veljković , and Marina Dabetić 

Abstract The emergence of cyberspace and its growing militarization have transformed the contemporary security environment, leading to the appearance of entirely new forms of state activity within the international context. Parallel to the development of the digital domain, the international order has begun to undergo significant changes, triggering tensions between hegemonic powers and challengers of the order. Within such a security context, cyber attacks have become an instrument of hybrid warfare, with the targeting of critical infrastructure representing one form of malicious activity. The increasing digitalization of state institutions and economic systems, combined with the complexity of attack attribution and the emergence of sophisticated state and non-state cyber actors, further accentuates the vulnerability of critical infrastructure, whose functioning constitutes the foundation of state functioning. Given that disabling critical infrastructure may generate significant socio-economic consequences, strengthening its resilience has emerged as a priority of modern state security policies. The Western Balkan states, characterized by limited material and human resources, face pronounced vulnerability in an increasingly anarchic cyber environment. The geopolitical position of the region, as well as the differing foreign policy alignments of individual states toward ongoing international crises, have made them targets of coordinated cyber operations. The aim of this paper is to analyze the resilience of critical infrastructure in the Western Balkan states through case studies of cyber attacks on Montenegro, Albania, and Serbia, which illustrate the structural deficits that small states face in the domain of cyber security. The research employs a qualitative methodology based on a series of case studies. The findings indicate a pronounced vulnerability of Western Balkan

A. Bogićević

Institute for Strategic Research, University of Defence, Belgrade, Serbia
e-mail: aleksandar.bogicevic@mod.gov.rs

S. Veljković · M. Dabetić (✉)

Vinča Institute of Nuclear Sciences—National Institute of the Republic of Serbia, University of Belgrade, Department of Physical Chemistry, Belgrade, Serbia
e-mail: fmarina@vin.bg.ac.rs

S. Veljković

e-mail: sanela.veljkovic@vin.bg.ac.rs