

PROPOSTA DI PROTOCOLLI OPERATIVI PER LA CONSERVAZIONE DI GALLERIE STORICHE IN MURATURA

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Abstract

The management of road infrastructures, such as bridges and tunnels, provides an example of preventive maintenance approach to avoid emergency interventions and to keep risk at acceptable levels. Some of these infrastructures also presents an intrinsic value as single architectural assets and landscape signs. However, the infrastructural scale of these constructions, as well as the demands of functionality and safety, pose new challenges in terms of conservation. The present article describes a specific protocol for the risk assessment of historic masonry tunnels and provides indications for the consequent interventions. The protocol is based on the guidelines for risk classification and management, safety assessment and monitoring of existing tunnels, integrated with approaches from the field of architectural restoration. The proposed protocol was applied to the "Autocamionale Genova-Valle Po" and made it possible to assess the state of conservation of surfaces and to identify specific critical points for masonry tunnels. To face these criticalities, the first intervention proposals were made, overcoming the ordinary maintenance work, which usually consider only technical aspects, and introducing some sensitiveness also to the conservation needs.

Keywords: *masonry tunnel, safety assessment, historical infrastructure, planned conservation*