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Enhancing Operations Cognitive Processes: A User-Centric Interface for Critical Operations

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ABSTRACT

Every day, the decision capabilities of coordinators and managers in critical operations environments are threatened by task overload attributable to poorly designed and integrated systems interfaces. The interface can make the difference between crossing a user's cognitive threshold, thus leading to breakdowns, or staying within its limits and allowing for operations to run smoothly. The purpose of this paper is to outline the components of a critical nature for future interface design in critical operations environments as well as to put forth a holistic system design that will allow for the user to absorb higher task loading shocks efficiently.