

# Reflexive Analysis of Operator's Erroneous Actions

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Considerable part of all operators' erroneous actions is based on their communication. One of the most effective tools for social cognitive study of this communicative basis is the method of reflexive analysis. The reflection is especially useful in the investigation of interaction. It is a form of "feedback". This is an important mechanism for human psyche functioning projects operator's active attitude to reality.

A reflexive cognitive process aims to understand the rules that individuals employ to reveal meanings externalized in their actions. The social world is a world based on meanings and images. The reflection is a way of social cognition that assigns motives, social meanings and values to people in order to reveal motives and values that give rise to certain actions. The social cognitive process should be investigated concurrently and sequentially on the base of following mechanisms: typing, scenario analysis, styling and individual story. Some communicative barriers between operators that cause erroneous actions could be overcome by reflexive analysis.

The paper presents the supplementation and development of an advanced Human Reliability Analysis (HRA) technique – Performance Evaluation of Teamwork (PET) method with an algorithm for reflexive analysis to overcome erroneous communication and decision-making.