



STANDARDIZED OPERATIONAL PROCEDURES BEST PRACTICES

Excerpted from How to Write Procedures by Antonio Javier & Gaspar Marichal; Professional Safety, March 2023.

Whether referred to as Standard Operating Procedures (SOP), Standard Operating Guidelines (SOG), or Directives, standardized operational procedures aid firefighters and emergency medical responders in recalling information and making decisions. A procedure is a communication tool that describes the most efficient and safer way to complete a task.

However, creating and implementing a procedure can be problematic, especially if the writer neglects their team's needs, preferences, and physical and cognitive abilities. Procedures that have been validated by an interactive design process will better reflect the realities of the task.

Generally, if a task is safety-critical, a procedure is recommended. A safety-critical task is a task in which poor human factors could cause or contribute to a significant accident. Well-developed procedures support human performance in several ways:

- They reduce memory workload, which increases the capacity to deal with unanticipated events.
- They ensure critical steps are performed.
- They standardize good practices.
- They are the basis for consistent training and education.
- They help minimize the likelihood of knowledge-based errors.

Here is a step-by-step approach to developing effective procedures:

- 1) **Identify Needs** – What tasks are critical to the successful performance of the agency? Analysis of accident and injury records and soliciting ideas from firefighters and EMTs will provide insights into what operational issues require a procedure.
- 2) **Decide the Level of Procedural Support** – How thoroughly does the procedure need to be? What degree of flexibility should be given to account for:
 - Task complexity and situational factors.
 - Human-to-machine interaction.
 - Task demand; cognitive load/overload, memory demands, internal and external stresses.
- 3) **Understand the Hazards and Risks** – The aim is to foresee what and how things could go wrong. Most hazard identification and risk assessments are carried out by teams using one of many tools, such as brainstorming, task analysis, and fishbone diagrams.
- 4) **Create a Human-Centered Procedure** – The procedure needs to be relevant, concise, and workable. Consider the following factors:
 - Decide on the format and structure – Often, the agency has a standard template for SOP, SOG, and Directives. Decide how to best design and structure the information and resources within the template.
 - Give it a logical and intuitive name.
 - Keep it simple – More is less. Focus on must-have information.
 - Keep the number of steps to the bare minimum – Give only one action per step. Do not expand unnecessarily on individual steps.

- Consider flow charts, checklists, and other learning aids – Use eye-catching symbols and colors for critical information or steps.
- 5) **Test It Out Before its Rollout** – Request feedback from stakeholders. Consider a tabletop exercise to test the procedure under various conditions if needed.
- 6) **Launch It and Train Personnel** – emailing a copy of the procedure is not enough. How will the agency make the procedure and associated learning aids available when and where the procedure is needed? Will laminated copies be beneficial?
- How will the training need to be updated to incorporate the new procedure? In what time frame?
 - How will the agency maintain effective version control? It is not unusual for individuals to print or digitally save copies on personal devices. These can become uncontrolled and outdated.
- 7) **Continuously Monitor and Update the Policy** – Nothing stays the same. Review the procedure regularly. Review the procedure if any of the following occur:
- Complaints are raised by firefighters, EMTs, agency leaders, or the citizens served by the agency.
 - Changes to the hardware, software, or environment involved in the procedure.
 - The policy is mentioned in an after-action debriefing or incident/accident investigation.

A well-written procedure is not the end of undesirable actions and decisions but rather the starting point. Consistent training, coaching, and enforcement by leaders will be needed to attain consistently desirable outcomes.