Revolutionizing and Humanizing Operating Procedures
Through e-Procedure Technology

E.P. Lander, ATR, Inc.
Jack Hardy, Global Procedure Services
www.smartprocedures.com

ABSTRACT
Operating procedures – can’t live with them, can’t live without them. Despite increasing complex layers of protection, redundancy and engineering controls, 60-80% of incidents are attributable to human error. Exasperated by changing experience demographics of the workforce, operating companies are taking a serious look at the deficiencies and risks of poor operating procedures, and associated practices and programs. While procedures can and should be the lifeblood of safe and efficient operations, they also represent significant and growing risks to performance, safety and compliance.

The status quo for procedures is highly formatted (and rigid) paper-based documents created mostly in MS Word and managed by a document management system. Subject matter experts indicate they spend up to 75% of their time formatting these documents. Operators have many reasons why they do not use or trust procedures, including too much or too little detail, inconsistent formatting, missing and outdated information, including operating limits.

E-procedure (database) technologies add several new business-critical dimensions to procedure development and management. These technologies provide higher levels of usability, flexibility and attention to human factors. E-procedures not only eliminate much of the wasted formatting time bogging down SMEs, they provide options for viewing and accessing the content, no longer limited to just a paper print-out.

With flexible output options, operators have on-demand access to procedure content in whatever format they need whether paper, screen, tablet, PDA or even text-to-speech. Output can be output to simplified checklists, performance evaluations, step-by-step training or interactive procedures. While senior operators can access automated checklists, less experienced personnel can access just-in-time training or a graphical job-aid. Procedure content can be analyzed electronically against hundreds of rules and controlled programmatically to ensure adherence to best practices and evolving regulatory requirements.

E-procedures also can be automatically output into interactive step-by-step computer-based training and performance checklists. This flexibility provides significant improvements in knowledge transfer and assessments capabilities. In addition, an e-procedures system has the ability to embed and dynamically update operating limits, setpoints and other critical information throughout all procedures enabling the SMEs to focus on procedure quality - not formatting and administration.

This presentation will discuss two case studies involving one of the world’s largest oil companies and one of the world’s largest private companies upgrading over 30,000 procedures providing compelling reasons why PSM audits and industry standards will soon have higher benchmarks.