Group Support Systems (GSS) emerged as a rich, flexible toolbox for facilitators to help move a group toward a goal. Research shows that groups using GSS can be far more productive than teams using other means to accomplish their tasks. However, experience in the field suggests that organizations do not tend to become self-sustaining with GSS until they incorporate the technology into their daily work practices, in support of mission critical tasks that are conducted over and over again by the practitioners themselves, rather than under the guidance of an outside facilitator. This suggests a new, perhaps higher role for GSS facilitators: to create and leave behind well-crafted, well-tested repeatable processes for others to execute on their own.

The minitrack on GSS Patterns brings together a diverse set of papers that focus on technology support for repeatable collaborative processes. Five of the papers describe repeatable collaborative processes and the technologies that support them. The sixth paper presents a new technical development to address a key challenge in the delivery of task-specific GSS applications.

Enserink, in his paper, Creating a Scenariologic – Design and Application of a Repeatable Methodology, describes a step-by-step process employed by organizations to design scenarios collaboratively. He illustrates the concept and importance of scenarios. Further, through a number of case studies he shows how scenarios were constructed in a workshop setting using GSS. He continues to propose a repeatable method based on the experiences in the case studies.

The paper, Applying a Group Support System to Mission Analysis, by Harder and Higley, presents tools and processes that can be used to support military analysis education. The authors’ concepts are richly illustrated with two case examples: collaborative mission analysis for brigade and urban terrain operations.

In their paper, Addressing Productivity Concerns in Risk Management through Repeatable Distributed Collaboration Processes, Van Grinsven and De Vreede examine the nature of risk management, and then describe a repeatable risk management process based on GSS. Using Focus Theory as a frame of reference, they ground their work in field experiences and expert opinions regarding productivity challenges and opportunities in collaborative risk management.

Jingle, Pengzhu, and Shaochuan describe their experiences in supporting decision tasks in organizations through a repeatable methodology of the argumentation process in their paper entitled A Framework for Argumentation of Decision Task Generation and Identification. They present the process, introduce the technology support that they developed to support it, and present the first lessons learned from several experiences.

In their paper, Token Dispensers for GSS Race Conditions: Locking Things That Don’t Exist, Briggs and Gregory extend the Apollo architecture (an open GSS architecture optimized for delivery of task specific GSS applications) with Token Dispensers, a server-side capability for accommodating race conditions. Race conditions occur when two or more users working on the same shared data element simultaneously execute operations that might produce conflicting results. The paper describes the details of Token Dispensers, and summarizes the results of extensive field trials for proof-of-concept and proof-of-value.

Finally, Grünbacher, Halling, Biffl, Kitapci, and Boehm, in their paper, Quality Assurance Techniques for Requirements Negotiations, argue the importance of identifying and removing early life-cycle defects such as ill-defined requirements. Based on the EasyWinWin approach, a repeatable methodology supported by GSS, the authors describe and evaluate collaborative role-oriented inspection techniques.

Each of these papers discusses different technologies and different processes. Each offers a unique contribution to our understanding of how software tools can be developed and deployed in support of mission critical collaborative repeatable tasks. We commend them to your reading.