Sustainability, Encroachment and Room to Maneuver (SERM) is one component of the technology suite of tools for installation planning.

Background
Fort Future is a research program designed to produce capabilities critical to the Army’s ability to transform its installations in the tight timeframe required to support our emerging forces. Much as field commanders gain a superior advantage by visualizing the battle space, installation planners will be able to make strategic decisions by visualizing results of many different scenarios.

The U.S. Army Engineer Research and Development Center (ERDC) is conducting Fort Future research and development in support of the Assistant Chief of Staff for Installation Management (OACSIM). Fort Future will create a system-of-systems that unites existing and new computer models to form a “virtual installation.” Building on currently available and planned Standard Army Management Information Systems (STAMIS) that provide a snapshot of the present, Fort Future will use modeling and simulation to help decisionmakers explore potential consequences of their decisions.

Problem
The Army’s installations are currently undergoing a transformation that is necessary to “meet our combatant force requirements and soldier expectations.” Appropriate sustainable planning is a component of transformation and includes the integration of mission essential task list (METL) analysis, installation support requirements, and various aspects of the planning process such as master, natural, and cultural resource planning.

To join together numerous pieces of the planning process, and to proactively plan to support current and future military activities, various tools must be developed and integrated together through scientific practice, coordination, and technology.

Requirements Builder — Tom Bozada
The Requirements Builder is both a requirements determination process and an assessment tool. It establishes a language and a process for installations to quantify their tenant support requirements and then measures how well they satisfy those requirements. Activities use the metrics established by the process to plan, monitor, analyze, and improve internal processes.

Facility Charrette Process — Annette Stumpf
Installation sustainability plans should address the physical components of Army installations and their interactions and interrelationships, to create a sustainable environment inside the fence, while maintaining an adaptive ability to support current and future mission requirements. The charrette process is integral to sustainability planning and synthesizing the requirements and needs of many stakeholders.

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Integrated Installation Planning: Technology for Sustainable Installations

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14. ABSTRACT
    The Army's installations are currently undergoing a transformation necessary to meet our combatant force requirements and soldier expectations. Appropriate sustainable planning is a component of transformation and includes the integration of mission essential task list (METL) analysis, installation support requirements, and various aspects of the planning process such as master, natural, and cultural resource planning. A sustainable planning approach is required to ensure that the U.S. military has the facilities and resources to support future combat systems and training doctrine. Integrated installation planning will combine with modeling and simulation to compare and contrast various scenario results, and to provide for optimal solutions. The Integrated Installation Planning mission and application suite will provide the primary software tools to accomplish these tasks.
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**Approach**
A sustainable planning approach is required to ensure the U.S. military has the facilities and resources to support future combat systems and training doctrine. Integrated installation planning will combine with modeling and simulation to compare and contrast various scenario results, and to provide for optimal solutions.

**Benefits**
Integrated installation planning will enable users to:
- Identify potential encroachment concerns
- Transform management practices before resource pressure becomes critical
- Mitigate potential areas of concerns
- Facilitate planning to support current and future installation tenants.

**Tools**
The primary tools in the Integrated Installation Planning mission and application suite are:
- **SERM Technology Suite**, which will assess and compare risks, conduct trend analysis, project future changes and identify impacts to mission, and mitigate potential problems
- **DINRMP (Dynamic Integrated Natural Resource Management Plan)** tool will facilitate workflow and resource management
- **ICRMP Toolbox**, which will provide a process to assist Cultural Resource Managers develop Integrated Cultural Resource Management Plans (ICRMPs).
- **Requirements Builder**, which will enhance the installation commander's ability to develop a mission essential task list
- **Facility Charrette Process**, a brainstorming technique in which participants from differing disciplines and backgrounds share in the design process.

**SERM — James Westervelt**
The ability to use military land within the fence is partially determined based on what is happening “outside the fence line.” The SERM program provides technologies and data to help installations create a proactive environment to protect critical existing assets.

**DINRMP — Kelly Dilks**
The DINRMP provides a secure environment to develop and manage the INRMP development process by tracking changes and monitoring progress, with the potential to link the plan with the decision environment upon which it is based.