Decision Support System for Shipyard Sequencing and Planning

Reduce ship construction lead-time through:
- Improved planning, scheduling, sequencing, and resource allocation
- Better estimates and management of capacity
- Production plans based on “pull” signal from erection

and attained by:
- Adopting a holistic or systems view – multiple yards and programs considered concurrently
- Putting engineering tools in the hands of decision makers
- Providing a virtual laboratory to experiment with production alternatives prior to implementation
- Employing simulation models to capture salient shipyard behavior
- Utilizing detailed shop models and high-level yard or sector-wide models
- Effectively integrating disparate model types

- Resource-loaded project network
- Discrete-event simulation task network model
- Facilities (process) model

Task structure is basis for models
- Schedule
- Performance
- User & model decision-support interfaces
- Output for decision support
- Yard-level simulation models
- Shop-level simulation models

Acknowledgements