

Glostén's consulting services are more than an outgrowth of our design practice. They are central to our philosophy of serving clients by understanding and solving their business challenges. We cultivate long-standing client relationships that provide our associates an in-depth view of marine operations of all types, enhancing our consulting services. Whether your needs require a conventional or one-of-a-kind approach, look to us for the solution.

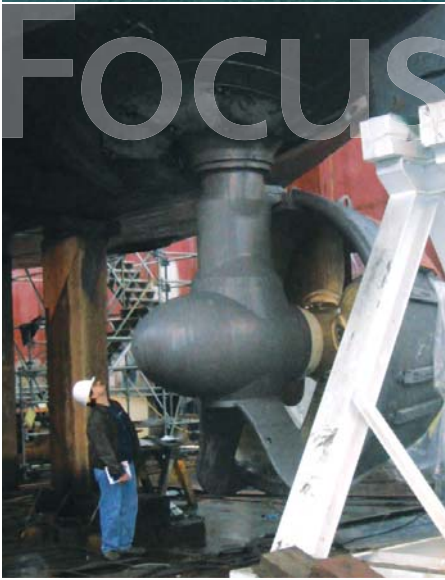


### Transportation Planning and System Optimization

- Marine transportation and intermodal systems selection
- Regional public marine transportation analysis and forecasting

### Economic Modeling and Forecasting

- Single voyage cost estimating
- Long-term operating cost modeling and forecasting
- Financial forecasting
- Sensitivity analysis of capital and operating costs



### Marine Logistics and Operations Planning

- Voyage simulation
- Voyage routing
- Met-ocean and ice data analysis
- Loading and discharge for roll-on, float-on or lift-on operations
- Temporary, project-specific port facilities development in remote regions
- Vessel motions prediction and seafastening design

### Contingency and Emergency Response Planning

- Shipboard oil pollution emergency plans (SOPEP)
- Station bills
- Emergency response plans and drills
- Integration (bridging) for multiple contractors' emergency response plans
- Anti-piracy plans



## Risk Assessment and Readiness Review

- Peer review of operations planning
- Formal risk assessment workshops

## Salvage Engineering

- Hydrostatic analysis
- Strength and stability assessments
- On-site consulting

## Management of Competitive Procurements

- Competitive cost or best-value acquisitions
- Procurement of transportation services
- Procurement of shipyard services

## Market Surveys and Asset Valuation

- Targeted vessel search
- Search for qualified service contractors
- Market valuation

## Regulatory Assessment and Liaison

- U.S. codes (USCG, ABS, USCOE)
- International regulations (IMO, SOLAS, STCW)
- Consequences of new and changing rules
- Regulatory submittals

## Cost Estimating

- Acquisitions
- Components, systems, vessels
- Operating costs
- Schedule disruption costs
- Phasing sequence costs



## Serving Many Industries:

- Commercial shipping
- Tugs and barges
- Ferries
- Offshore and upstream development
- Oil and LNG shipping
- Oceanographic research
- Shipyards
- Marine construction
- Salvage
- Government agencies
- Civil engineering
- Environmental products and services
- Industrial clients



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