ClassNK R&D Roadmap

2017

Aims of R&D

Ship Safety – Marine Environmental Protection

Innovation of Marine Technology through advanced IT

Four Focus Areas of R&D

Rule Development

Survey Technology Innovation

Marine Environmental Protection

Revolutionary Technology Development

Rule Development

- Full Review of Rules for the Survey and Construction of Steel Ships
- Full Review of Rules other than Survey and Construction of Steel Ships (Machinery, Materials etc.)
- Development of GB3-compliant new Technical Rules for current IACS CSR

Survey Technology Innovation

- Development of Support Tools and Systems for Surveys/Plan Approval
- Remote Survey Technologies (Drones etc.)
- Development of Survey Robots
- Rationalization of Surveys utilizing Digitalization

Marine Environmental Protection

- Assessment of AppropriateCombustion of Compliant Fuel for Sulphur Regulations
- Evaluation and Certification Technology for Ship Performance in Actual Seas
- Environmental and Safety Assessment of Ships using new Alternative/Renewable Fuels

Revolutionary Technology Development

- Establishment of Ship Data Platform
- Performance and Condition Evaluation Technology utilizing IoT and Big Data
- Comprehensive Reform of Classification Operations (Rules, Certification, Surveys) using the latest IT
- Safety Evaluation Technology for Autonomous Ships

Short/Mid-Term (2017–2021)

Long-Term (2022–)

Foundational R&D geared towards Core Technologies and Integrated HR Development through R&D

Utilization of Damage Information