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

Short/Mid-Term (2017-2021)

Long-Term (2022-)

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 GBS-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 Appropriate Combustion 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

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

Utilization of Damage Information