

**Professionalism** 



### **Special Technology**



### **Customer-oriented**













### ONE for ALL, ALL for ONE

KATEC is growing as "one of the ILS leading companies" based on the customer-oriented and innovative entrepreneurial spirit.



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### A MESSAGE FROM CEO

Welcome!

KATEC, with the everlasting efforts for innovation, will be dedicated to providing the best quality and value to meet our customers' needs.

#### KATEC is a professional ILS Elements Developer.

Since 2001 when KATEC was established, we have aimed for its professionalism.

#### KATEC has its own Special Technology and know-Hows.

Innovations for the company's management and Education of Updated skills for our ILS engineering experts in the rapidly changing business circumstances have enabled us to give our customer the best quality service.

Meanwhile, this great effort rewarded KATEC with its own special technology and know-hows today.

#### Customer-Best (or Customer-oriented) Business Management Company

The "Customer-Is-Best" principle has been adopted since the company's start. All of KATEC employees are doing the utmost to make a better quality and service under the motto.

Thank you.

**CEO Kim Youngwoon** 

#### **Customer Needs drive Technology.**

In the prompt response of the rapidly changing technology, KATEC established Vessel FLS(Follow-on Logistics Support) System Institute to contribute to the robust maintenance systems that our customers require for the items.

Customer-oriented, all our researchers are driving R&D breakthroughs in efficiency and performance. Your rooting for the company will foster better relations between you and us. Thank you.

R&D Director (retired REAR ADMIRAL LH) Ahn Younggil





# COMPANY PROFILE



KATEC is growing as "one of the ILS leading companies" based on the customer-oriented and innovative entrepreneurial spirit.















### **COMPANY HISTORY**

2001

Registered as a collaborative company to Daewoo Shipbuilding & Marine Engineering Co., Ltd., and Samgong Co., Ltd.

2008

Registered as a collaborative company to Daesung Marine Tech, Low Technology Co., Ltd. Samyang Chemical Industry, and Samyang Composite Technology Co., Ltd.

2009

Registered as a collaborative company to Hyundai Heavy Industries, Co., Ltd., Hanjin Heavy Industries, Co., Ltd., and Kangnam Co., Ltd.

2010

Recognized by Korea Industrial Technology Association (KOITA) (2010), Registered as a collaborative company to Bumhan Industry Co., Ltd., KTE Co., Ltd., Century Co., Ltd.

2011

Registered as a collaborative company to Pyunghwa Engineering Consultants Co., Ltd., Samyoung Logistics & Engineering Technology Service, Hyunkwang Electronics & Telecommunications, Doosan Mottrol Co., Ltd., and Mirae Industry Machine Co., Ltd.

Established

Navy Equipment ILS
 Project 2006 - 2014

 Moved HQ to the present site

2001

2003

2006

2009

2012

2013

Air Force Equipment
 ILS Project 2003 - 2014

Established Technology Institute

 Naval Vessel ILS Project 2009-Present  Opened Ulsan Branch and Jinhae Annex



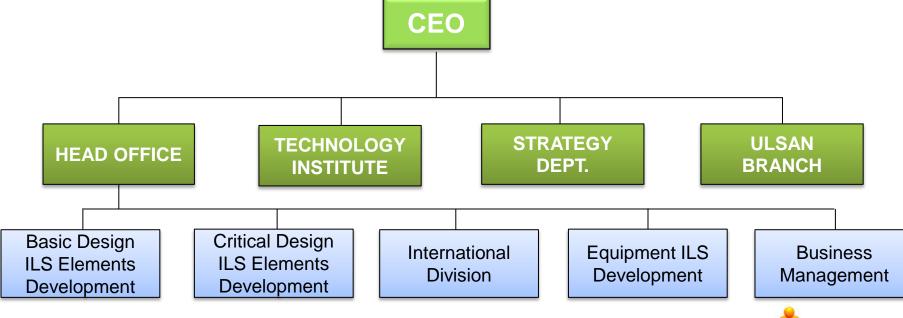








## **ARS** ORGANIZTION















### **Fulfilling Customer Wants**









**Retaining Responsibility Thru Life** 





**Lead ILS Developer** 















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Computer Based Training

CBT KATEC LSA

**Logistics Support Analysis** 



TRANS LATION

IETM

Interactive Electronic Technical Manual



Korea Advanced Technology











### INTEGRATED LOGISTICS SUPPORT

"Integrated Logistics Support is an integrated and iterative process for developing weapon systems and a support strategy that optimizes functional support, leverages existing resources, and guides the system engineering process to quantify, lower life cycle cost and decrease the logistics footprint, making the system easier to support."

#### Requirements

#### **Exploratory Development**

#### **System Development**

#### **Test and Evaluation**

#### Deployment



Requirements









RAM Target
Requirements Study
Research and Preliminary Data Capture

Exploratory Development

Providing the basis of LSA

**System Development** 

## Test and Evaluation Developmental Test

### Operational Test

#### **Elements Development**

### ing and Danleyma

### Fielding and Deployment of the weapon systems

**Deployment** 

### Follow-on Logistic Support

#### LSA

**RAM Analyses** 

Failure Modes, Effects, and Criticalities Reliability Centered Maintenance Level of Repair Maintenance Task Analysis Providing the basis of ILS Elements

Reflecting Logistic Supportability on the Design

#### **Elements Development**

KATEC
Korea Advanced Technology











### RAM

RAM stands for Reliability, Availability and Maintainability. It is a methodology used to predict asset performance for a given configuration in terms of reliability, maintainability and availability.

### Reliability

Probability that an item will adequately perform its specified purpose for a specified period of time under specified environmental conditions. ► MTBF, MRBF, MKBF

**MTBF MTTR** Ao

## OMS/MP

**RAM Target** 

System/Structure information Build-up

RAM Allocation/Prediction

Failure Definition / Judgment **Standard Setting** 

**FMECA** 

**RAM-D Test & Evaluation** 

**Requiring Design Improvement** 

War & Peace time

and Mission Profile

**Operational Mode Summary** 

**Main Equipment** Design

**Providing Basic Analysis Database** 



### **A**vailability

Probability that a system, subsystem or equipment is in a specified, operable and committable state at the start of a mission

▶ Ao, Aa, Ai

RAM Maintainability

Probability that an item will conform to specified conditions within a given period of time when maintenance action is performed in accordance with prescribed procedures and resources ► MTTR.MR











### LOGISTICS SUPPORT ANALYSIS

#### LSA

LSA (Logistic Support Analysis) is a systematic activity to identify, define, analyze, quantify logistic support elements for naval vessels and weapon systems over the total life cycle.

#### **Effects of LSA**

- A. Optimization of Logistic Support Requirements which influences on the Design
- B. Minimizing Downtime (Maximizing Readiness)
- C. Minimizing Operating & Support cost
- D. Simplification of Support System



Some parts of Tank





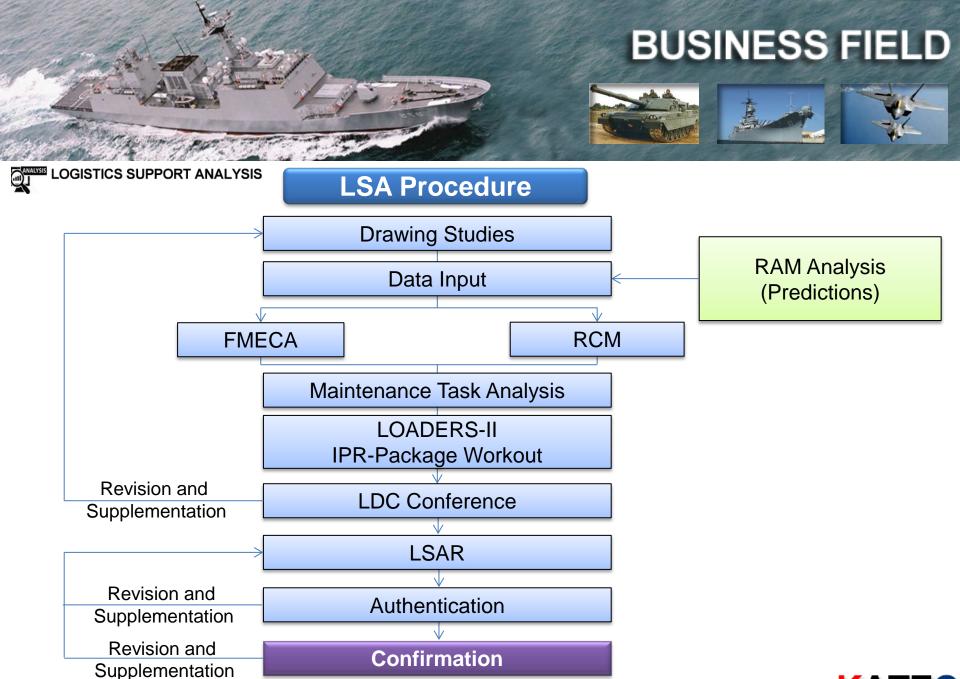
























#### **TECHNICAL MANUAL DEVELOPMENT**

#### **IETM**

IETM (Interactive Electronic Technical Manual) is the computerized and synthesized publication which is designed to give the optimum accessibility and readability as to the technical information of a system.

### **Advantages of IETM**

- 1. Easy to Manage and keep the great amount of technical documents digitalized.
- 2. Able to use the information more correctly by multi-media.

IETM is categorized in accordance with the TM Defense Specification (KDS-0050-0004-4., on Dec. 13th, 2007).

LEVEL	DESCRIPTION
LEVEL 1	Not Indexed Page Image
LEVEL 2	Indexed Page
LEVEL 3	IETM of Sequential Structure
LEVEL 4	IETM of Hierarchical Structure
LEVEL 5	Integrated Technical Information System

			SEARCH					
LEVEL 1	<b>\</b>	<b>Y</b>						
LEVEL 2	<b>Y</b>	<b>V</b>	<b>\</b>	<b>V</b>				
LEVEL 3	<b>Y</b>	<b>V</b>	<b>\</b>	<b>V</b>	<b>Y</b>			
LEVEL 4	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>Y</b>	<b>V</b>	
LEVEL 5	<b>V</b>	<b>V</b>	<b>\</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>

1) SGML: Standard Generalized Markup Language

2) MRFA: Multiple Result of Failure Analysis













### COMPUTER BASED TRAINING



### CBT

- We develop and provide the e-Learning CBT materials that are implemented through the computer.
- We develop a creative program which is most cost-effective and time-saving.
- CBT has the features of the ILS field and requirements to supply diverse learning opportunities for a trainee's needs.

### **Functions Realized**

Hyper-link

e-Learning Rate Management

Print Screen

Multimedia

Function of Learning Evaluation

Providing "Help Index"

Search of Terms and Abbreviations / Acronyms

MAP













#### **TECHNICAL DATA TRANSLATION**



**KATEC** will also carry out the various data or document translation such as Manuals, Drawings, Test or Inspection Procedures, Specification or Standards, and the Technical Proposals, etc.

1	Consult	Contact us by phone (+82-55-541-3232) or e-mail (katec.intnl@gmail.com).
2	Quote	After checking the source documents and the related data, KATEC will email or phone you regarding the translation service cost estimate, required date, and the rate, etc.
3	Translation	Required Precision and Quality will be secured in translating.
4	Proofread	KATEC will send the client the first draft of the translation and check thoroughly if there are unsuitably used terminology, contextual errors and omission, typing errors, etc.
5	Final Delivery	The final draft will be delivered in due time.

