Enhancement of Business Risk Management

— Reform of Decision-Making Processes in Business Activities —

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Mitsubishi Heavy Industries, LTD
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I. Background (1): Chronology of events

Losses from AIDA cruise ship construction

Insufficient to merely analyze the causes of cruise ship loss and then implement response measures. Needs to be recognized as a serious and urgent Group management issue whose resolution is indispensable to future growth.

Establishment of Business Risk Management Division under direct control of CEO (April 2016)

This report (following pages)

Business risk management enhancement activities (including analysis of current status and response measures)

Establishment of Cruise Ship Business Evaluation Committee (April 2016)

Evaluation results reflected in business risk management

Analysis of loss causes and evaluation of business viability

This report (additional materials)
I. Background (2): Current status of risk management, by target area

**Compliance risk (compliance with laws/social responsibility)**
- Group-wide compliance firmly in place (Reaching to socially required level)
- Now strengthening region-specific response capability in tandem with globalization of business activities

**Brand/reputation risk**
- Now strengthening activities in CSR, PR, GR, SR, IR, etc. (including brand story)
- Currently working to prevent reputational damage from cruise ship construction and other business risk issues

**Business risk**
- Since the 1990s, risks arising from business activities have generally become greater and more diverse (see pages 5-6).
- Enhancement of business risk management is urgently needed to prepare for business expansion from further globalization and the development of new fields and new markets.
I. Background (3): Issues in decision-making processes

Since the 1990s, technology has become more sophisticated and complex, business has become more globalized and competition is more intense. Overreliance on decision-making driven by individual business segments has resulted in more cases of major losses from new business fields. (see page 6).

Reforms of decision-making processes and deployment of adequate resources are needed.
I. Objective (further reinforcement of earning capacity)

- Earning capacity and financial structure have been strengthened and improved through business scale expansion and structural reforms.
- However, before business scale expansion occurred, losses arising from business-related risks became larger and increasingly diverse.

By reinforcing business risk management, we will limit and control the occurrence of risks to the utmost extent, while pursuing stronger earning capacity during business scale expansion.

Projects generating major extraordinary losses

<table>
<thead>
<tr>
<th>Start date</th>
<th>Business area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 Business Plan</td>
<td>Commercial aircraft Tier 1 (new model)</td>
</tr>
<tr>
<td>2008 Business Plan</td>
<td>Paper printing (new customer)</td>
</tr>
<tr>
<td>2010 Business Plan</td>
<td>Solar batteries (new product)</td>
</tr>
<tr>
<td>2012 Business Plan</td>
<td>Onshore wind turbines (new market)</td>
</tr>
<tr>
<td>2015 Business Plan</td>
<td>Cruise ship construction (business re-entry)</td>
</tr>
<tr>
<td></td>
<td>Onshore wind turbines</td>
</tr>
<tr>
<td></td>
<td>Commercial aircraft engines (participation in new joint development)</td>
</tr>
<tr>
<td></td>
<td>Cruise ship construction</td>
</tr>
</tbody>
</table>
Ⅱ. Basic concept

Large number of product businesses
Specialized characteristics of individual businesses

Transition from focus on domestic market to globalized market

Need to improve quality and number of response-capable corporate personnel

Need to reform segmented organizational culture (Both corporate and business segments)

Reform of decision-making processes in business activities
- Clarify roles and responsibilities of all parties concerned, including top management
- Formulate decision-making processes suited to global strategies (With participation from CTO and Shared Technologies dept.)

Business risk management enhancement plan

Review of business systems, including product mix
→ Strengthen measures implemented during execution of 2015 Business Plan

Reform of organizational culture
→ Accelerate human resource exchanges across business segments and activities by the committee for reforming commercial ship operations at Nagasaki Shipyard, etc.

Organized Risk Management (see page 8)
Key Functions (see page 9)
Reinforcement of process (see page 10)
※ Successive process improvements within PDCA cycle
Pursue more organized risk management by 1) and 2) below; clarify roles of management officers, business segments and corporate departments

1) Establish “Business Risk Management Charter” as Company’s foremost set of rules
   → Clarify risk management targets, etc.

2) Establish “Business Risk Management Committee” headed by CEO
   → Create list of business risks; discuss policy response by top-level management
Ⅲ-2. Key functions

Business Risk Management Committee Structure:

CEO

Management conference

Business risk management

Operation risk
(Business Risk Management Division)

Technology risk
(Technology Strategy Office)

M&A/PMI
(Corporate Planning Department / Financial Strategy Department)

Currently considering method of involvement in MRJ business

CFO

(controlling divisions)

GC

CTO

HR

COO

(ceo oversight)

Risk Management Office
(Risk Management Secretariat)

Risk Solution Office
(response to current risks)

(executive divisions)

Currently considering method of involvement in MRJ business

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Ⅲ-3. Reinforcement of process

“Occurrence of business risk”
Create special response team and carry out response (monitoring, etc. in PDCA cycle)

◆ Secure experts from the Expert Company.
◆ Prepare management tools (visualization, knowledge sharing)
◆ Educate business department managers, SBU managers

Risk prevention and reduced frequency of occurrence

◆ Define and categorize business risks
◆ Have knowledgeable specialists participate in risk assessment discussions
◆ Develop tools (risk quantification, visualization, AI utilization)
◆ Strengthen discussions (participation of top management, business divisions and corporate departments)
◆ Review decision-making authority

Apply results to monitoring and improvement management processes

◆ Improve project execution capability through appropriate involvement of experienced human resources

CHECK/ACT

1. Risk designation
2. Risk analysis/evaluation
3. Consideration/execution of countermeasures
4. Designation of residual risks
5. Execution
6. Monitoring

① Risk designation
② Risk analysis/evaluation
③ Consideration/execution of countermeasures
④ Designation of residual risks
⑤ Execution
⑥ Monitoring

PLAN

DO

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Ⅳ-1. Summary: Anticipated results

Accelerate activities of 2015 Business Plan and, starting from the next business plan, aim to improve profit/loss by reducing annual extraordinary losses by more than half the average of the past 10 years (approx. ¥30 billion)

Average of past 10 years: ¥60 bn/yr
### IV-2. Summary: Execution schedule

<table>
<thead>
<tr>
<th>Measures being promoted</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018～</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>▼ Establishment of organization directed by CEO</td>
<td>▼ Establishment of cruise ship business evaluation committee</td>
<td>▼ Formulation of “Business Risk Management Charter”</td>
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<td></td>
<td></td>
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<td>Swiftly set measures (see page 10) in place, and further enhance them</td>
</tr>
<tr>
<td>Major existing risks</td>
<td>SONGS arbitration</td>
<td>Deliberation and preparation</td>
<td>Transition to new systems</td>
</tr>
<tr>
<td>Future risk measures</td>
<td>Cruise ship business</td>
<td>▽ Review system for promoting commercialization</td>
<td>Promote special measures for commercializing MRJ business</td>
</tr>
<tr>
<td></td>
<td>structural reform of commercial ship business</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall settlement to be reached by end of FY2016