~ Contributing to the establishment of a decarbonized society through insurance and services ~

**MSI initiates POC in China to address Electric Vehicle Challenges**

Mitsui Sumitomo Insurance Co., Ltd. ("MSI", President & CEO: Shinichiro Funabiki), a subsidiary of MS&AD Insurance Group Holdings ("MS&AD"), Inc., is set to launch a proof of concept ("POC") in China to provide comprehensive solutions for resolving issues in the use of electric vehicles ("EVs"), and to research and develop new insurance products and services. This initiative, starting from July 2023, is facilitated by the Global Digital Hub ("GDH") Shanghai[^1], a hub for promoting advanced initiatives, in collaboration with Mitsui Sumitomo Insurance Company (China) Limited ("MSIC"), NYK Zhenhua Logistics (Tianjin) Co., Ltd. ("NYK Zhenhua")[^2], and Panasonic Navinfo Mobility Technology Service (Beijing) Co.,Ltd ("Panasonic Navinfo")[^3].

Leveraging its global network and the power of open innovation, MS&AD is committed to contributing to the establishment of a decarbonized society through the provision of insurance and preventive services that compensate for the risks associated with EVs.

*1: MSI has established GDH in innovation cities across the globe, leveraging its global expansive business network. In April 2022, MSI established GDH Shanghai as its sixth GDH, aimed at promoting advanced initiatives in areas where China is leading, such as EVs, and working on solving social issues through the development of services before and after insurance and compensation.

*2: Joint venture of NYK Line, which operates logistics business in China.

*3: Joint venture of Panasonic Holdings Corporation, which provides battery analysis cloud services in China.

### 1. Context

In China, the world’s largest market for EVs, safety and economic risks due to battery malfunctions and degradation have become issues for EV use. This is of particular concern to businesses that have a large vehicle fleet and use it frequently such as logistics companies.

### 2. Project Overview

NYK Zhenhua will pilot the battery analysis cloud service provided by Panasonic Navinfo in its logistics service operations using EV trucks. MSIC will analyze the results of the monitoring service and develop new insurance products.

#### Roles and Objectives of Each Company

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<thead>
<tr>
<th>Company Name</th>
<th>Summary</th>
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| NYK Zhenhua  | • Test the introduction of large EV trucks in real transportation operations to validate its environmental contribution, economic efficiency, and safety, with the aim to promote decarbonization in auto parts logistics business.  
• Equip large EV trucks with Panasonic's battery analysis cloud service, BetteRRRy, allowing for battery status visualization and abnormality detection.  
• Share the battery status data to MSIC, following analysis by BetteRRRy. |
| Panasonic Navinfo | • Provide BetteRRRy, a battery analysis cloud service, to promote usage of EV in the logistics industry  
• Increase EV operational safety by abnormal battery status detection, future state forecast and alerts  
• Improve operation’s economical efficiency through consulting based on the battery degradation status visualization |
| MSIC | • Verify the development and provision of the following two new insurance products:  
1. Battery Backup Service Liability Insurance  
Provides compensation for costs incurred due to actions taken when anomalies such as battery ignition are detected (e.g., costs for towing, inspection, and repair)  
2. Warranty Insurance For Battery Repair/ Replacement  
Covers the cost of repair or replacement when batteries experience abnormal deterioration beyond the manufacturer's warranty. |
Combining solutions with open innovation to solve challenges for EV applications

Prevention and Monitoring
- Vehicle use risk
- Battery specific risk
  - Panasonic Navinfo
    - Battery analysis cloud service

Compensation and Insurance
- Existing EV auto insurance
- MSIC
  - Battery backup service liability ins.
  - Warranty ins. for battery repair/replacement

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