Preface

The Energy Research Institute Network (ERIN) is a group of energy research institutes in the East Asia Summit (EAS) region. It was set up in September 2014 to discuss regional energy issues including the significant increase of energy demand due to stable economic growth. According to the ERIA report *Energy Outlook 2015*, oil and gas, especially liquefied natural gas (LNG) will continue to be an important fuel in 2040, and the supply of oil and LNG will depend on regions such as the Middle East and Africa. In this regard, ERIN chose the sea lane security of oil and LNG for Asia as one of its energy research projects in 2015.

This study consists of three parts: (a) forecasting future oil and LNG trade to assess congestion of choke points such as the Malacca and Singapore Straits, (b) analysis of sea lane risks such as piracy and congestion and extracting countermeasures, (c) country views on sea lane security. For this, ERIA requested The Institute of Energy Economics, Japan (IEEJ) and The Energy and Resources Institute (TERI) to conduct (a) and (b) respectively and formulate a working group to consist of several EAS countries for an overview of IEEJ's and TERI's research results and preparation of country views on sea lane security.

This report was prepared by the working group of sea lane security of oil and LNG for Asia, which consists of IEEJ, TERI, and members from China, Indonesia, Malaysia, and Thailand. Consequently, the working group meetings were held twice, one in February for kick off and the other in May to finalise the research results. The report also includes discussion results of the two working group meetings.

The report clearly mentions the following key messages to mitigate sea lane risks of oil and LNG transportation, (a) the development of alternative routes to avoid choke points, (b) joint regional patrols to prevent maritime piracy, and (c) measures to minimise the environmental impacts of oil spills.

Mr Shigeru Kimura Dr Tetsuo Morikawa Mr Siddharth Singh June 2016