

Foreword

Space and geospatial technology (SGT) are no longer just fields of advanced technological development and scientific research – they have become key components to help achieve sustainable development and strengthen resilience. They can improve the efficiency and resilience of industrial operations and effectively address issues in regional economic integration of the Association of Southeast Asian Nations (ASEAN).

Based on this understanding, the Economic Research Institute for ASEAN and East Asia (ERIA) commissioned the study project ‘Applying Space-based Technology for Building Resilience in ASEAN Region’ in 2014. The study concluded that geospatial technologies and space technologies have notable potentials to strengthen economic resilience, although the mechanism for integrating these technologies in a sustainable way has still not been well established. The study pointed out the necessity of (i) transborder mechanisms to deliver geospatial and space-based information from data providers to end users in disaster-affected areas, with the support of international activities; and (ii) financial schemes involving the private sector or public–private partnerships (PPP) to enable the collaborative integration of the technologies in sustainable and practical ways.

To implement such a mechanism, it is important to assess the benefits from SGTs and available applications, and conceptualise necessary policies. This report provides the status of SGTs and applications, and their potential benefits to ASEAN, based on past practices in Asia and the Pacific. It includes information about what combinations of technologies were applied and how they contributed to the resilience of ASEAN by key issues, including urban development, infrastructure planning and management, transportation management, improving quality of life, post-disaster management, improving logistics efficiency, sustainable operations of agriculture and fishery,