

SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE
ACTIVITIES (D5)

Knowledge Management and Collaboration in Space Activities (2)

Author: Ms. Elena Woo
Malaysian Space Agency (MYSA), Malaysia

Mr. Abadi Azhar
Malaysia
Mr. Hamid Salim
Malaysian Space Agency (MYSA), Malaysia

IDENTIFYING AND MANAGING THE RISKS IN SETTING UP THE ASSEMBLY, INTEGRATION
AND TEST CENTRE IN MALAYSIA

Abstract

The project of setting up Malaysia's first Assembly, Integration and Test (AIT) Centre began in 2005, after the establishment of the National Space Centre of Malaysia. This AIT centre will be able to provide testing facilities for spacecrafts and satellites manufacturers in the country and South East Asia. Among the test that will be provided are like the vibration and acoustic test, environmental test and electromagnetic test. It will also have the capability to measure moment of inertia and centre of gravity of the spacecrafts. This project is set to be a major stepping stone for a developing country like Malaysia as it will help to place Malaysia to become one of the key players in the space program especially among the neighboring countries in South East Asia like Thailand, Indonesia, Brunei, Philippines, Singapore and others. Therefore, risk management is crucial to ensuring that the construction and integration works will not have negative impacts on the overall project cost, schedule and technical performance. This paper aimed to present the risks identified in this project and compared it with typical construction project risks and uncertainties using the international standard "Project Risk Management – Application Guidelines (IEC 2001)". Besides risks coming from the construction process itself, risks from politic, economic, financial and cultural aspects deserves equal attention, as do those associated with quality assurance, and occupational health and safety. Identified risks will then be evaluated and ranked using both qualitative and quantitative methods. Finally, this paper outlines the four strategies, which are risk avoidance, risk reduction, risk transfer and risk retention that will be used to treat the identified and assessed risks. Review and monitoring of risks is done continuously to ensure that the final result will be a completed and workable AIT facility that meets all the specifications and requirements specified.