

Emerging MRO Services in SE Asia

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Trends driving regional MRO activity

- Growing intra-regional trade and tourism - AEC
- With lower fares and new entrants - region is the fastest growth area for air transport
 - Predicted as the largest civil airline market by 2030
 - 6% pa over next 20 years
- Asia Pacific has 24% of the civil global MRO market
 - 85% of APAC work remains in region
- Significant growth in other commercial aircraft sectors with OEM PBC support
 - Specifically oil and gas
- Significant growth in OEM and independent MRO support agreements in Asia Pacific
 - Increasing regional presence by OEM's
 - Limited engine and component capability in region
- More than 100 MRO service providers in Singapore – many are OEM JV
 - Significant MRO investment in Malaysia
 - Others have selected the Philippines and Thailand
 - Indonesia and Vietnam also growing



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BGA Sector in Asia

- SE Asia had the fastest growing civil rotorcraft fleet in 2015
 - Region accounts for 20% of global spend
 - More than a third of the fleet is for the oil and gas sector
- 33% of global military market helicopter sales will be in APAC
- Asia Pacific business aircraft deliveries more than doubled between 2007 and 2012
 - APAC fixed wing BGA fleet is only 4% of global total
- BGA MRO market: 56% fixed wing, 44% rotary wing
 - Fixed wing independent providers account for two-thirds of the work totaling some \$1.6bn pa - the balance by OEM's
 - BGA rotary wing operators perform the large majority of the work - 70% or around \$1.0bn pa



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Considerations in creating a regional MRO

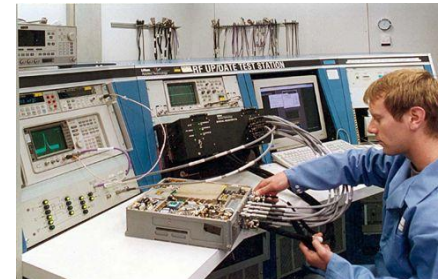
➤ Decision process in entering new markets

- What is the business strategy?
 - Market penetration – market size and growth
 - Lower cost base
 - Access to specific competencies
- Form of business incorporation?
 - Wholly owned or JV, or
 - Collaboration with airlines or OEM



➤ General Considerations

- Ease of doing business in country – risk assessment
- Investment climate – FDI incentives, regulatory issues
- Market potential – short term and long term
 - Opportunities for growth - capability gaps
- Competition
- Resource availability – pool of qualified personnel, suppliers
- New technology and higher reliability making investment appraisal harder
- Aircraft age, types, operating hours/cycles
- Cultural issues





Thank you for your attention!