

Developing Integrated Dashboard to Address Maritime Pollution, Illegal Logging and Flood Warning Activities

Effort by: The National Defence University of Malaysia and JANUS Ltd. UK



Message from the Vice Chancellor, NDUM

- Greetings and Best Wishes from The National Defence University of Malaysia (NDUM), Kuala Lumpur.
- The United Kingdom and Malaysia have strong historical, economic, military , education and people to people ties. Need to leverage on this.
- Look forward to continuing to develop a long term and sustainable relationship with the UK Space Agency and the UK Government in addressing some of the changes faced by Malaysia.



**GENERAL TAN SRI DATO' SERI
PANGLIMA HJ ZULKIFLI BIN
HJ ZAINAL ABIDIN
*Vice Chancellor, NDUM***

Malaysia Space Applications Stakeholder Group



Who We
Are

1

A collective of all Malaysia Government Departments and Agencies engaged in the policy, facilitation and use of space applications

2

A means to achieve International engagement and collaboration through the National Defence University of Malaysia and its Business Centre

3

A means to consolidate Malaysia collective budget and invest in national space applications priorities

4

A means to ensure that our collective Program work results in operational success derived from consensus throughout.

The National Defence University of Malaysia

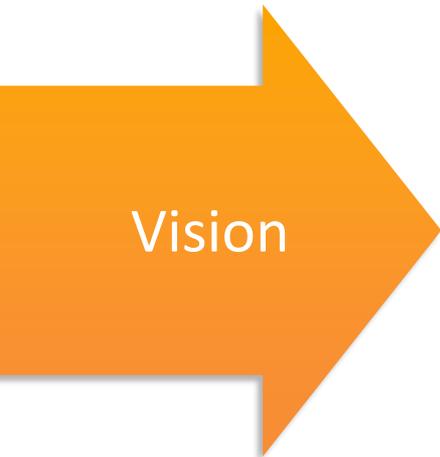
Under Command and Budget of Ministry of Higher Education the University has responsibilities to the Ministry of Defence for provision of Military Skills, Leadership and Technical Education. The University also has a collaborative agenda with the Ministry Of Science Technology and Innovation (MOSTI) for the Research and Development work undertaken at the Universities Faculties



The Vision

1

To Solve the immediate humanitarian, economic and ecological problems Malaysia



Vision

2

Malaysia aspires to be an Asean regional centre of excellence in tropical context in use of space applications

3

To create a long term partnership with UK Space Community to build technology and commercial success in Asean

The International Partnership



Collaboration

1

The Office of the PM – National Disaster Management Agency (NADMA)

2

National Defence University Malaysia and the Vice Chancellor

3

Ministry Of Science Technology and Innovation (MOSTI)

4

Space Applications Stakeholder Community Malaysia

5

Bringing together the International Stakeholders

6

Defining and managing the requirement

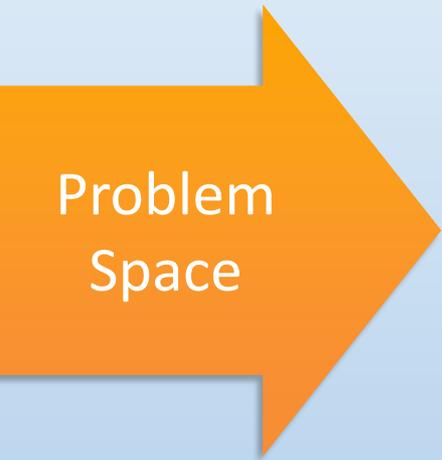
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Supporting the Program work. Trials and Development

8

Commercialisation

What is the problem



1

Advanced warning of Flood

2

Illegal Logging

3

Maritime Pollution

4

National Information Dashboard

Advanced Warning Of Flooding



Factors Affecting

1

Malaysia suffers a common Tropical Regional problem caused by excessive and unpredictable monsoon exacerbated by human development

2

Our vulnerable communities are often very remote

3

We need a single unified warning system deployed in all government departments

4

Malaysia has water level and rainfall sensors that need to become part of a greater solution

5

Malaysia will create a national disaster management procedure based on the warning system



Impact

1

The 2014 – 2015 floods affected 200,000 people killing 21

2

102 Healthcare facilities were closed while widespread dysentery took hold in refugee locations

3

Rubber and Palm Oil prices surged as crops were destroyed

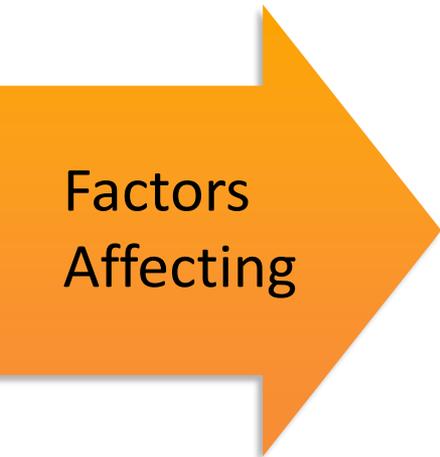
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Food shortages across the country

5

A State of Emergency was declared

Illegal Logging



Factors Affecting

1

There are many existing Programs that report the reshaping of forest area. Commonly referred to as deforestation.

2

Illegal logging costs the Malaysia economy around USD 1bn per annum in price erosion, export and tax revenue loss.

3

Illegal Logging is clearing vast areas of forest targeting a few high value specimens such as Agarwood (Aquilaria and Gyrinops types)

4

Illegal logging is disinheriting indigenous peoples of their land

5

Illegal logging deprives bio diversity and endangered species of their protected sites.



Agarwood also known as Oud can bring USD \$ 100,000 per kilo for unadulterated material on the black market

The forestry sector in Malaysia employs 200,000 and is worth USD \$5.7 Billion or roughly 2% GDP

Indigenous peoples rights are recognized under the National Land Code

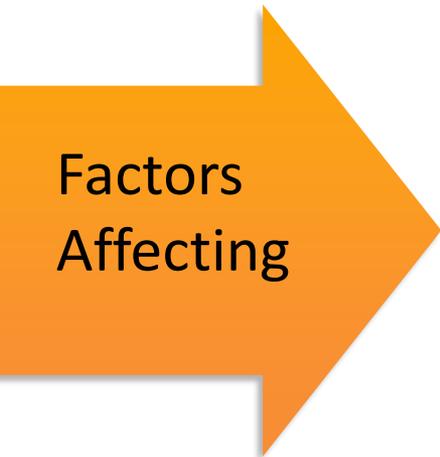
Timber tracking is paper based and based on removal passes

In 2012 12,000 Cubic Meters of illegal timber was seized

In 2013 government estimated that 12% of timber production was illegal



Maritime Pollution



Factors Affecting

1

The Malacca Straits are the second busiest shipping lane in the world behind the English Channel. There is no effective Maritime Pollution detection system

2

Illegal bilge discharge frequently makes landfall in mangrove swamp areas and other important bio-diverse coastal habitats

3

The countries bordering the Malacca Straits need to gather intelligence and evidence to allow interception, interdiction and prosecution of offenders according to MARPOL regulations

4

Malaysia needs an early warning to Maritime Pollution in order to respond quickly to sea and coastal cleanup needs

Information Dashboard

1

Malaysia needs a national, secure, entitlement based information dashboard available on multiple devices and across government departments.

2

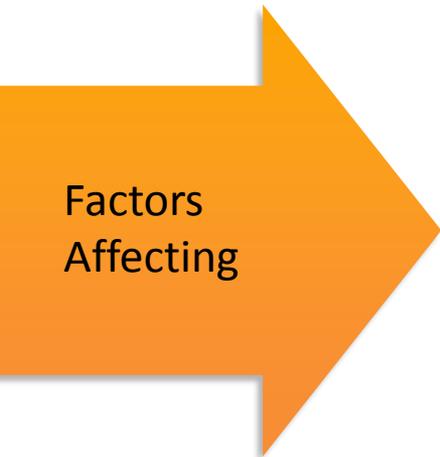
The dashboard must be scalable, first using the requirements advised in this presentation but later allowing other space applications to be integrated

3

The single dashboard concept unifies both this program and the Malaysia Space Applications Stakeholder Group thereby making operational and commercial success more likely.

4

A Prime contractor for all 4 requirements is preferred by Malaysia but it is hoped that many UK Companies would be part of the solution



Factors
Affecting

Managing The Program

1

UPNM will ensure the Program is supported through a unified Space Applications Stakeholder Group.

2

The Malaysian Space Applications Stakeholder Group will provide, free of charge whatever technical resource it is able to - negotiated as part of the bid submissions to UKSA.

3

The UPNM will cover the cost of in-country trialing of the proposed solutions

4

The successful Prime Contractor should have an existing PMO and established capability in Malaysia. Ideally the Prime Contractor will already have a working relationship with UPNM and the Stakeholder Group



What you
can expect
from us

The Commercial Process



Winning
Sales

1

How we manage Commercialisation from the outset

2

Gathering the stakeholders and getting buy-in

3

Making the system saleable and supported in Malaysia

4

The commercial relationship with UPNM

THANK YOU



Are

There

Any

?

Thank You
UK Space
Community