JOINT INTELLIGENCE PREPARATION OF THE OPERATIONAL ENVIRONMENT (JIPOE)

defence intelligence staff division

STEP 1 & 2

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TRAINING DIRECTORATE
DISD

WHAT IS JIPOE?

- DEFINITION:

- The analytical process used by joint int organisation to produce int assessment, estimate and other int product in support of the JFC decision making process

(MAFJP 5-01.1 JMAP)

INTRODUCTION

Cont:

- Is a component of joint op planning and provides specific inputs to the JMAP
- Its Continuous, Systematic and Dynamic Process for Analysing the Environment and Threat
- Purpose - Maintain Commander's/ Staff's situational awareness
- Assist the commander and staff to identify the threat's COG, PIR and tasks for the Int Collection Plan

WHAT IS DIFFERENT BETWEEN JIPOE AND IPB?

joint doctrine characterizes the IPB as requiring "micro-analysis … to support component command operations," while saying that "JIPOE and IPB analyses support each other while avoiding a duplication of analytic effort

INTELLIGENCE CYCLE

Intelligence Cycle and JIPOE

MISSION oriented int cycle → **JIPOE Products**

- **JIPOE Products:**
  - Graphic Overlays
  - Matrices
- **No specific format:**
  - Dependent on the commander and size of op
  - Capabilities of the J2 Staff
  - JFHQ SOP
- **Level of detail determine by:**
  - Planning time and resources aval
  - Size of JFHQ
  - Info sources
  - Analysis and production tool

1a. Review the Situation
1b. Scope the Threats
1c. Identify Significant Operational Environment Characteristics
1d. Identify Areas of Intelligence Interest and Responsibility
1e. Identify CCIR

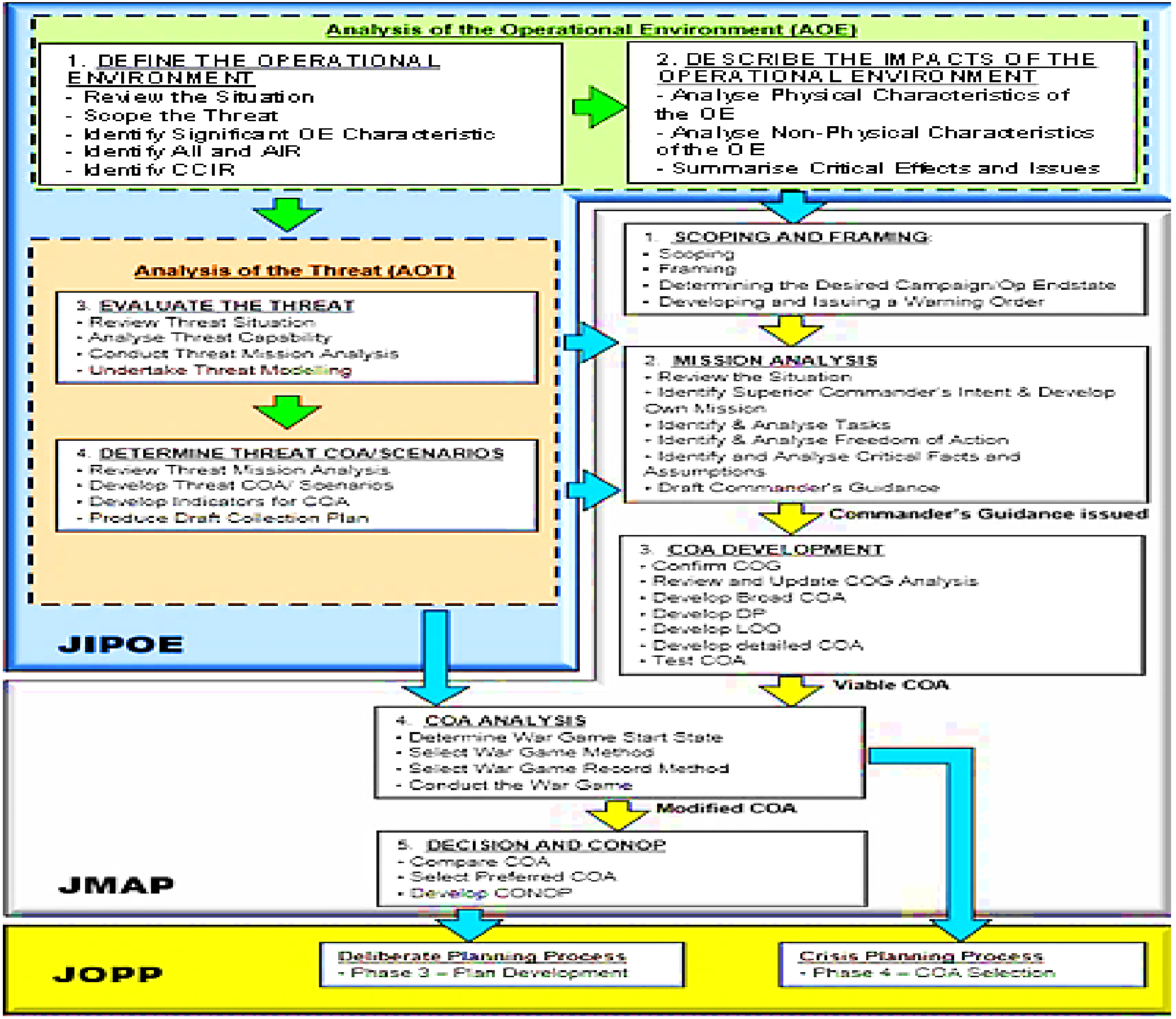
2a. Analyse Physical Characteristics of the Operational Environment
2b. Analyse Non-Physical Characteristics of the Operational Environment
2c. Summarise Critical Effects and Issues

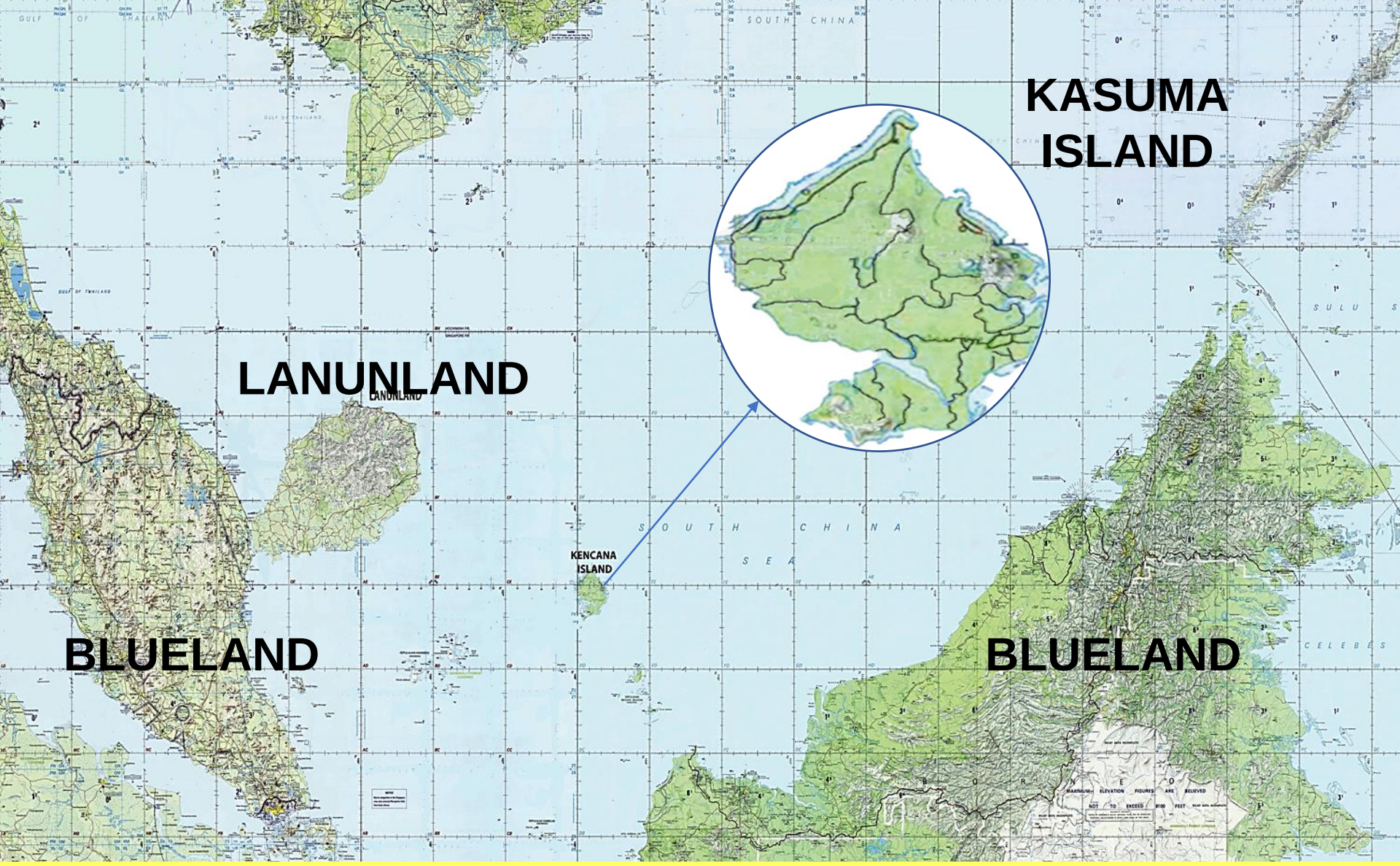
JIPOE

1	Define Operational Environment
2	Describe the Impact of OE
3	Evaluate Threat
4	Determine Threat COA/ Scenario's

4a. Review Threat Mission Analysis
4b. Develop Threat COA/Scenario
4c. Develop Indicators for COA
4d. Produce Draft Collection Plan

3a. Review Threat Situation
3b. Analyse Threat Capability
3c. Conduct Threat Mission Analysis
3d. Undertake Threat Modelling


Analysis of the Operational Environment (AOE)
1. DEFINE THE OPERATIONAL ENVIRONMENT
- Review the Situation
- Scope the Threat
- Identify Significant OE Characteristic
- Identify AII and AIR
- Identify CCIR
2. DESCRIBE THE IMPACTS OF THE OPERATIONAL ENVIRONMENT
- Analyse Physical Characteristics of the OE
- Analyse Non-Physical Characteristics of the OE
- Summarise Critical Effects and Issues
Analysis of the Threat (AOT)
3. EVALUATE THE THREAT
- Review Threat Situation
- Analyse Threat Capability
- Conduct Threat Mission Analysis
- Undertake Threat Modelling
4. DETERMINE THREAT COA/SCENARIOS
- Review Threat Mission Analysis
- Develop Threat COA/ Scenarios
- Develop Indicators for COA
- Produce Draft Collection Plan
JIPOE
1. SCOPING AND FRAMING
- Scoping
- Framing
- Determining the Desired Campaign/Op Endstate
- Developing and Issuing a Warning Order
2. MISSION ANALYSIS
- Review the Situation
- Identify Superior Commander's Intent & Develop Own Mission
- Identify & Analyse Tasks
- Identify & Analyse Freedom of Action
- Identify and Analyse Critical Facts and Assumptions
- Draft Commander's Guidance
Commander's Guidance issued
3. COA DEVELOPMENT
- Confirm COG
- Review and Update COG Analysis
- Develop Broad COA
- Develop DP
- Develop LOO
- Develop detailed COA
- Test COA
Viable COA
4. COA ANALYSIS
- Determine War Game Start State
- Select War Game Method
- Select War Game Record Method
- Conduct the War Game
Modified COA
5. DECISION AND CONOP
- Compare COA
- Select Preferred COA
- Develop CONOP
JMAP
JOPP
Deliberate Planning Process
- Phase 3 – Plan Development
Crisis Planning Process
- Phase 4 – COA Selection



GENERAL CONFLICT OVERVIEW

LANUNLAND CLAIMED KASUMA ISLAND BELONG TO HER AND DECLARED TO USE MILITARY APPROACH TO OCCUPY KASUMA ISLAND

1a. Review the Situation
1b. Scope the Threats
1c. Identify Significant Operational Environment Characteristics
1d. Identify Areas of Intelligence Interest and Responsibility
1e. Identify CCIR

JIPOE	
1	Define Operational Environment
2	Describe the Impact of OE
3	Evaluate Threat
4	Determine Threat COA/ Scenario's

S1 - Define Operational Environment

- **Sub Step 1 - Review The Situation**
- **Sub Step 2 - Scope the Threats**
- **Sub Step 3 - Identify Significant OE Characteristics**
- **Sub Step 4 - Identify Areas of Intelligence Interest and Responsibility**
- **Sub Step 5 - Identify CCIR**

1. **Define Operational Environment**
2. **Describe the Impact of OE**
3. **Evaluate Threat**
4. **Determine Threat COA/ Scenario's**

Define Operational Environment

A methodically researching all significant characteristic of the OE within the geographical confines of where commander and JOPG members expect the op to be conducted

SS1 - Review The Situation

- Quick assessment of the circumstances which created the reqmt for the JIPOE
- J2 staff will initiate discussion and research to determine:
  - Time aval to dev JIPOE
  - Level of JIPOE (Time constraints and level of detail)
  - Further guidance from the commander or the superior commander
  - Aval of ISR assets

1. **Define Operational Environment**
2. **Describe the Impact of OE**
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Review The Situation

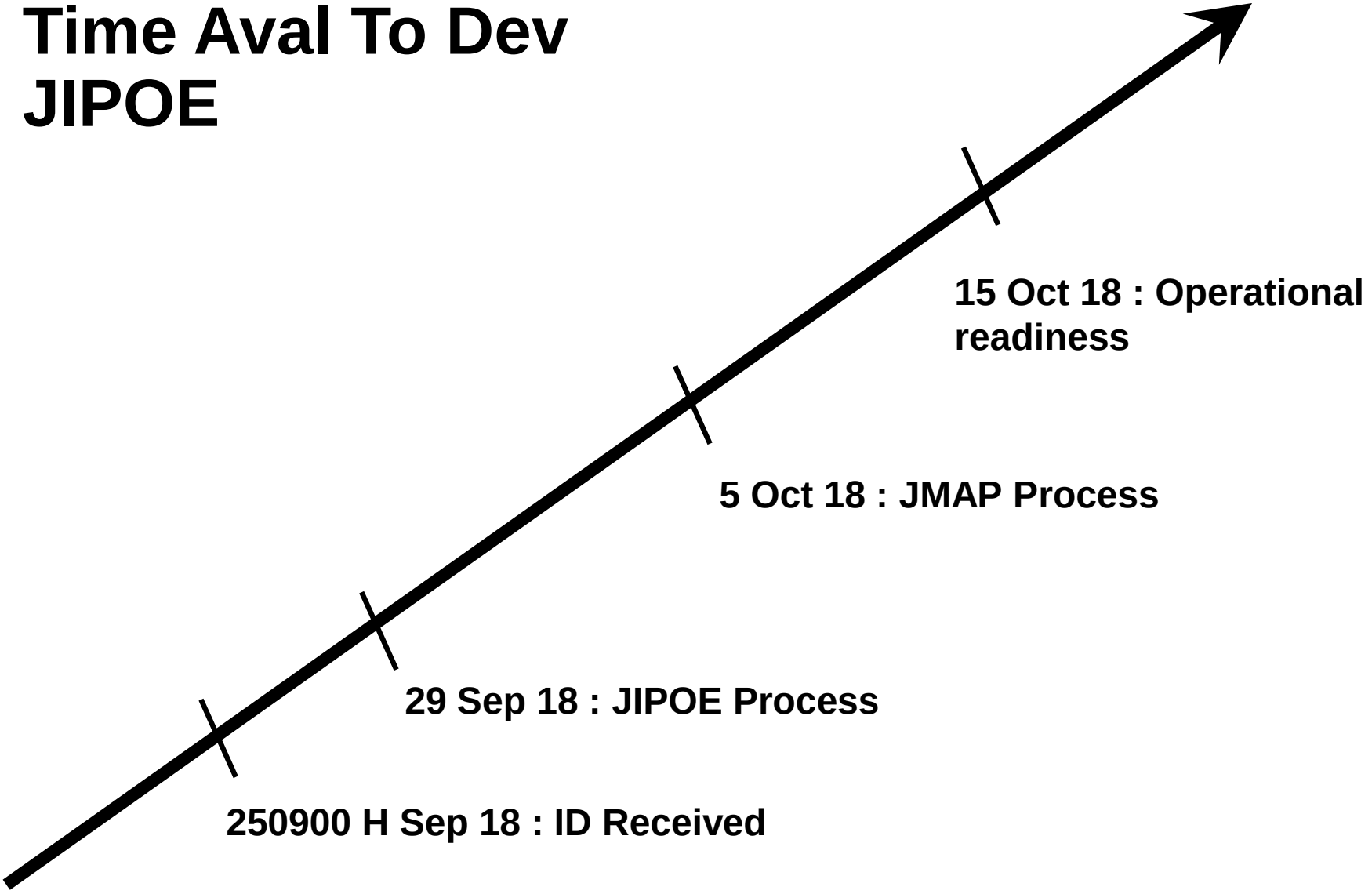
Quick assessment of the circumstances

- Over decade tension between BLUELAND and LANUNLAND
- LANUNLAND claiming KASUMA Islands as part of their sovereign territory
- Build up military activities for massive mil ops; Harassment over BLUELAND airspace in SoM and SCS
- Both armed forces at highest readiness status (offensive)

Sample 1-1

Review The Situation

Time Aval To Dev JIPOE



Review The Situation

Aval ISR Assets

All the assets available with ISR capabilities from 3 services for the specific op

	Aerial	Surface
NAVY	2 x Super Lynx 3 x Fennec	1 x NGPV 2 x Frigate 1 x SSK
ARMY	2 x Agusta A109 LOH 1 x Sp Coy (MIB)	1 x Sqn (11 GGK) 1 x Int Coy (MIB)
AIRFORCE	2 x Beechcraft Super King Air B200T MPA 2 x Eurocopter EC 725	1 x Sqn PASKAU

Deduction. ISRs assets may suffice to cover the operations

Sample 1-4

SS2 - Scope the Threat

- A brief assessment of the operational and environment threat - for subsequent research of the environment and determine any limitation on op
- Where an threat can be clearly identified with an intent that will create conflict
- Provides an overview of likely threat sources

  eg HADR – The source of pandemic
- Identify the broad description of the threat

  eg LANUN may deploy the Southern Command to engage in the KASUMA Island conflict

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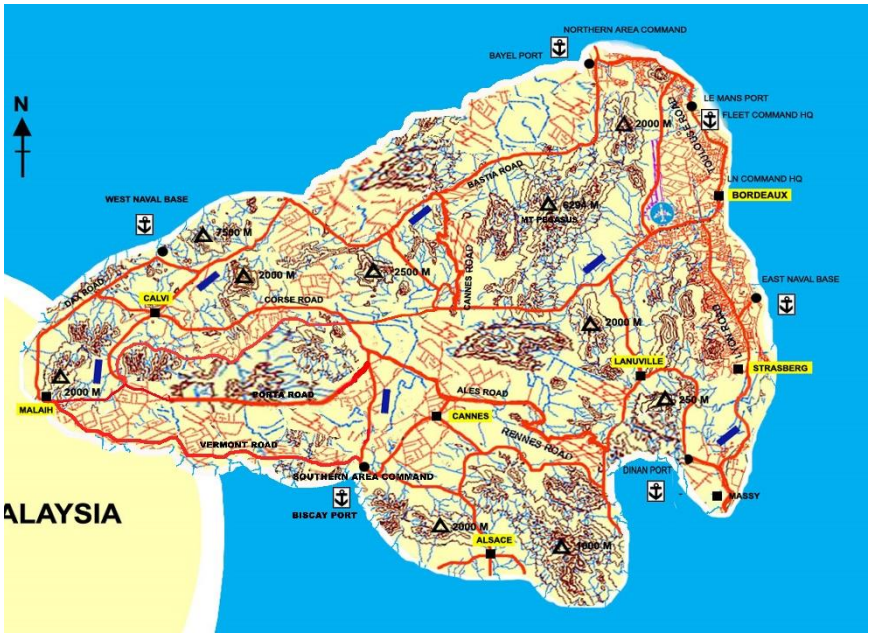
Scope the Threat



7 MILITARY REGIONS (OLD)

5 COMMAND ZONE (NEW)

LAN have tendency to deployed Southern Comd (JTF TIGER) to engage in the conflict.

Consideration factor:

- Geographical Challenges
- Show of force in SCS (Military Built up)
- Concentration of force

Sample 1-5

SS 3 - Identify Significant OE Characteristics

Comprehensive research of the physical and non-physical domains which military activity is expected to take place

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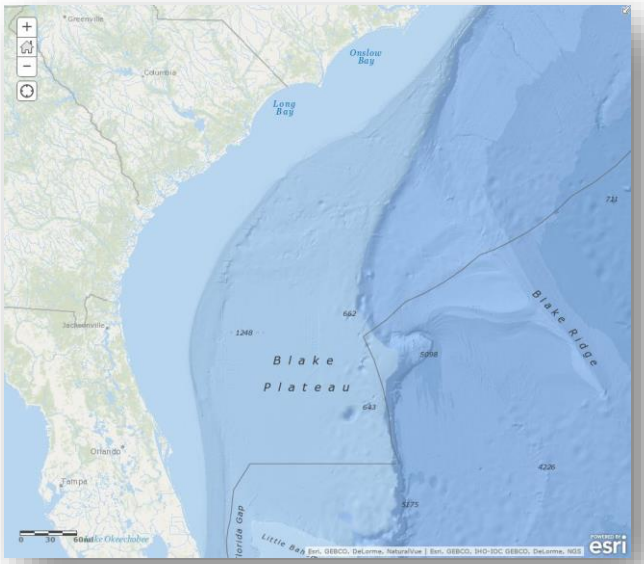
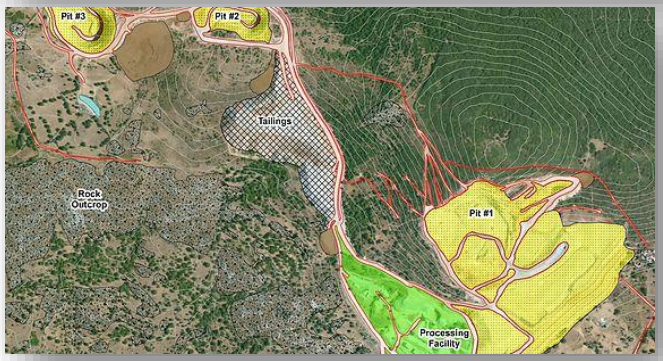
Identify Significant OE Characteristics

Geospatial

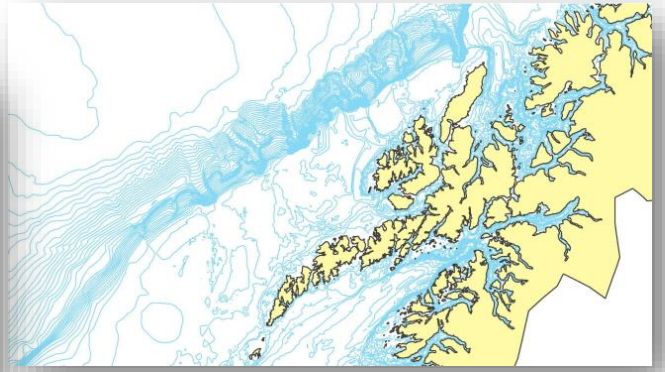
LAND AND ROADS

SOILS AND WETLANDS





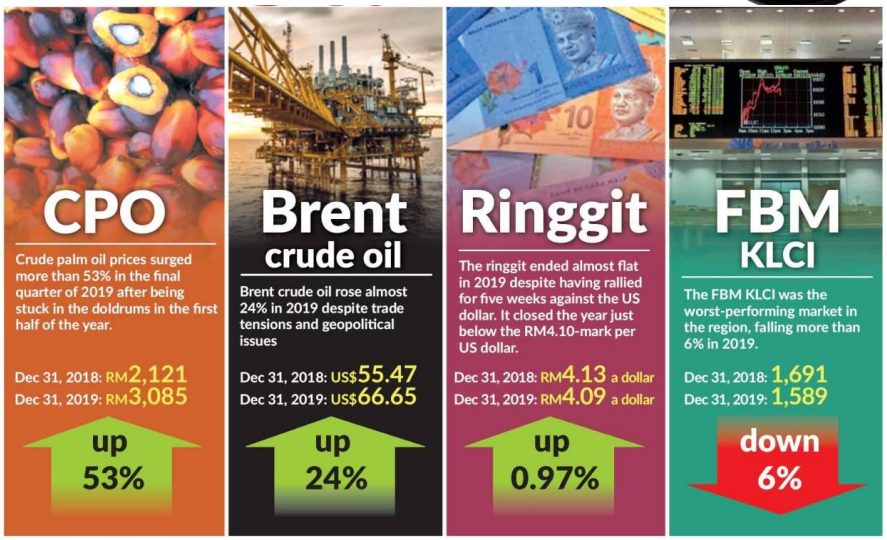
TOPOGRAPHY AND HYDROGRAPHY



AEROSPACE

Identify Significant OE Characteristics

Infrastructure



Economy

celcom

unifi

astro

HUAWEI 5G

Info Environment

Line of Communication

Identify Significant OE Characteristics

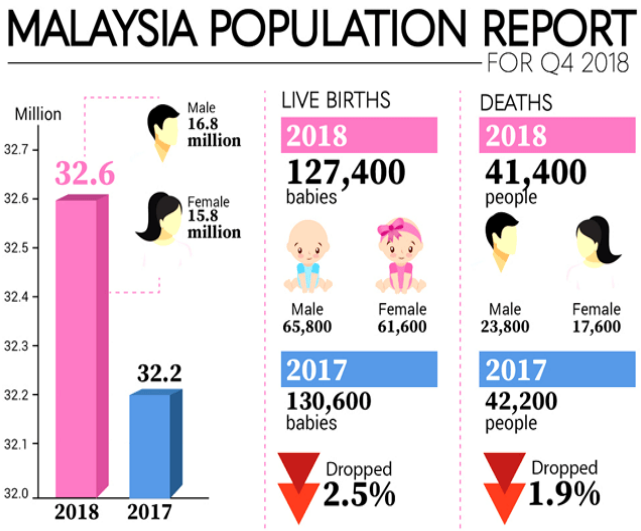
HUMAN FACTORS

Government

Socio-political

Culture

Religion



Population Analysis

JE
Nipah
Koronovirus
H1N1

Health and Environmental Threat

Identify Significant OE Characteristics

STAKEHOLDERS

ExxonMobil

COMITE INTERNATIONAL GENEVE

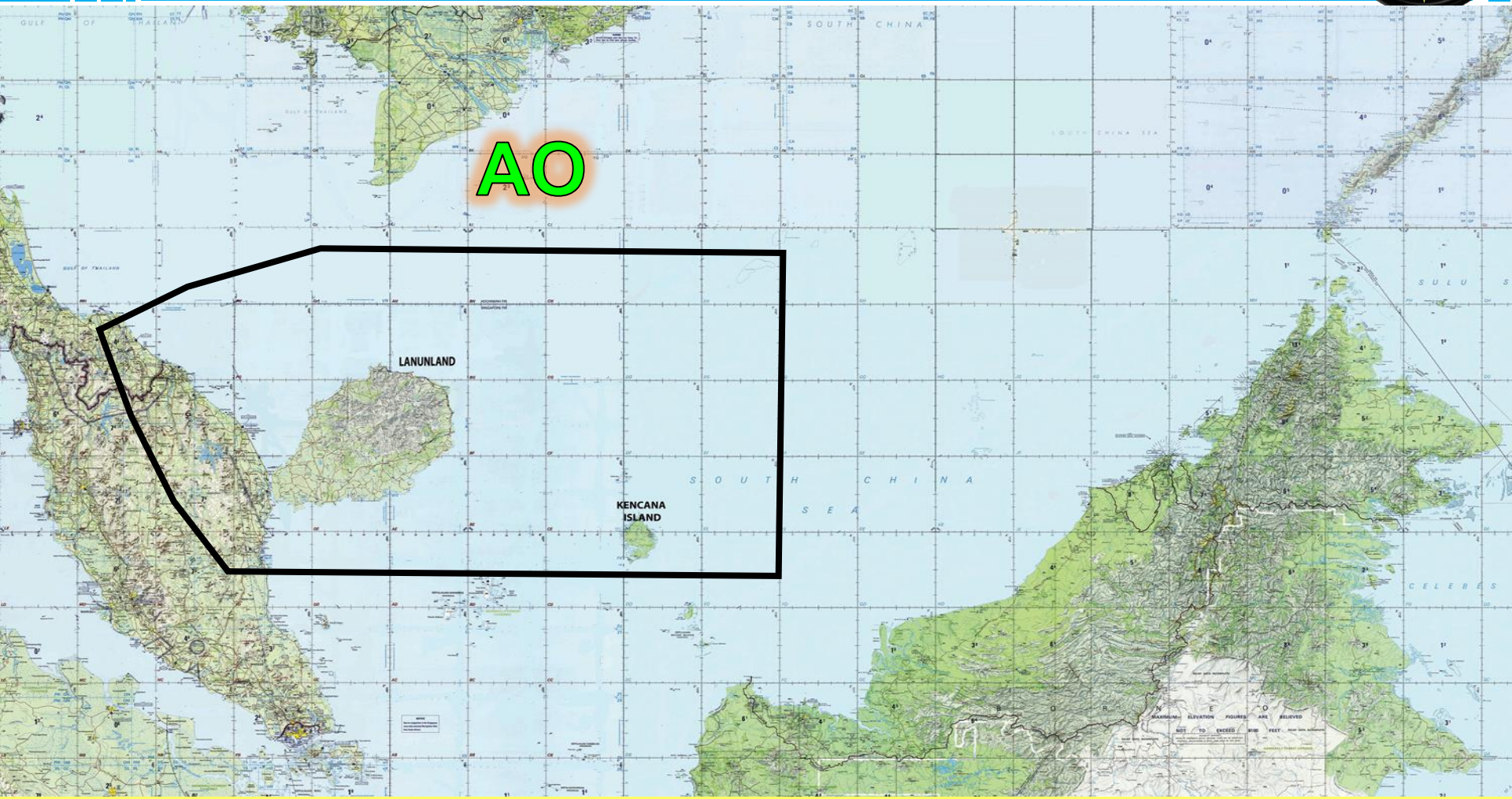
ORGANISATION OF THE ISLAMIC CONFERENCE • ORGANISATION DE LA CONFERENCE ISLAMIQUE

asean

NATO
OTAN

WORLD BANK

SS4 - Identify AII & AIR



AREA OF OPERATIONS (AO)

… An operational area defined to or by the JFC for land, airspace and maritime forces

AREA OF INTELLIGENCE RESPONSIBILITY (AIR)

Focus of intelligence activities, necessary tasking priority on ISTAR assets to cover the area

AREA OF INTELLIGENCE INTEREST (AII)

Extend beyond the AIR and include threats from the non-physical domains – Strategic info

SS4 - Identify CCIR

- The recommendation of Int Reqmt to the commander
- Commander decides what info is deemed to be critical
- Linked to potential DP and the commander's need for situational awareness
- Minimum number of CCIR to ensure that they are all critical

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Identify CCIR

- Priority Intelligence Requirements (PIR)
- Friendly Forces Information Requirements (FFIR)
- Essential Elements of Friendly Information (EEFI)

1. **Define Operational Environment**
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CCIR: Info reqmt identify by the commander as being critical to facilitating timely decision making

Identify CCIR

- The commander utilizes CCIR to estb the priorities for info gathering and reporting
- CCIR wording should be in the form of statement, not questions
- Responsibility to answering CCIR should be assigned to the most appropriate JFHQ branch

CCIR: Info reqmt identify by the comdr as being critical to facilitating timely decision making

Identify CCIR

Priority Intelligence Requirements (PIR)

- Those IR about the **threat**, **environment** and **stakeholder** for which a commander has an anticipated and stated priority in his task of planning and decision-making
- PIR are approved by the commander, managed by the COS and researched by J2 staff
- Example:
  - *Will en use chemical agents on our reserve force before it leaves KASUMA Island?*
  - *It is the GREENLAND will allow en to use his airbase at JENTAWI?*

Identify CCIR

Friendly Forces Information Requirements (FFIR)

- Info the commander needs about friendly forces in order to develop plans and make effective decisions
- Depending upon the circumstances, info on unit loc, composition, readiness, personnel status and log status
- FFIR are approved by the commander, managed by the COS and researched by the J3 and J5
- Example:
  - THE UNIT HAS TO CROSS THE RIVER
  - THE SELECTED COA REQUIRES 6 TAC BRIDGES FOR EXECUTION
  - **TAC BRIDGES STATUS -** A FFIR. (A DROP IN THE OP REQMT RATE BELOW 6 WILL REQUIRE ADJUSTMENTS TO THE PLAN)

Identify CCIR

Essential Elements of Friendly Information (EEFI)

- How the commander views his unit from the en comdrs perspective
- Info on friendly forces and/or activities the commander deems critical to protect from en collection efforts
- Specific facts about the disposn, capabilities and intentions of own/friendly forces which threat may need to undermine the own/friendly op
- Example:

"THE COUNTER-RECON REPORTS THAT EN RECON HAS PENETRATED THE SY FORCE IN THE SOUTH; THIS WOULD PUT THEM ON A PATH TO IDENTIFY THE TF RESERVE"

  - **THE TF RESERVE LOC AND STR** - AN EEFI

Identify CCIR

- The commander now has to determine what action will prevent the res from being found by the en recon
- He notifies the commander with recommendations
  - Move res?
  - Send out elements to find and destroy recon?
  - Something else?

❖ EEFI may include:

- Loc (Units, Res, CPs)
- Unit strengths
- Obstacle locations and compositions

❖ Main objective – To prepared OPSEC plan

Identify CCIR

PIR	FFIR	EEFI
LAN labours reactions and military capability in BLUELAND	Availability and readiness of BLUFOR IO	Preparation and deployment to FMB of Abn force
Location of JTF Tiger SSG	Follow on forces / ATG at 7 days NTM	Advance party activity on SCS
LANFOR sustenance capabilities for protracted op	The intensity of POL and ammo for fighter /strike operations	JTF fwd log base
Capability and readiness of LANFOR amph forces	Aircraft availability on D+3 Airborne Op	ISR activity on KASUMA Island
I&W for LANFOR strike and fighter action	AD unit capability to joint TF 3.1 on D+5 specific op	Loc of JTF Reserve

Sample 1-7

KEY PRODUCTS OF STEP 1

- **Graphical Overlay** (Graphical products which depict where maritime, land and air movement is unrestricted, restricted or severely restricted) *example*
- **Human Factors**
- **Social and Psychological Matrix/Overlay**
- **Normalcy Graphic** (identify patterns, profiles and deviations from usual activity) *example*
- **Environmental Graphics** (may depict historical or forecasted climatic or weather conditions such as temperature, visibility, wind, precipitation, cloud cover and humidity) *example*

KEY PRODUCTS OF STEP 1

- **Combination Graphics** (Key environmental factors that may affect operations may be combined in the one graphic for further illustrative purposes) *example*
- **General Threat Characteristics**
- **Identification of AII, AIR and AO**
- **List of CCIR** - PIR, FFIR and EEFI
- **Step 1 JIPOE brief** (includes time constraints, guidance available, ISR assets available and a brief assessment of the threat)

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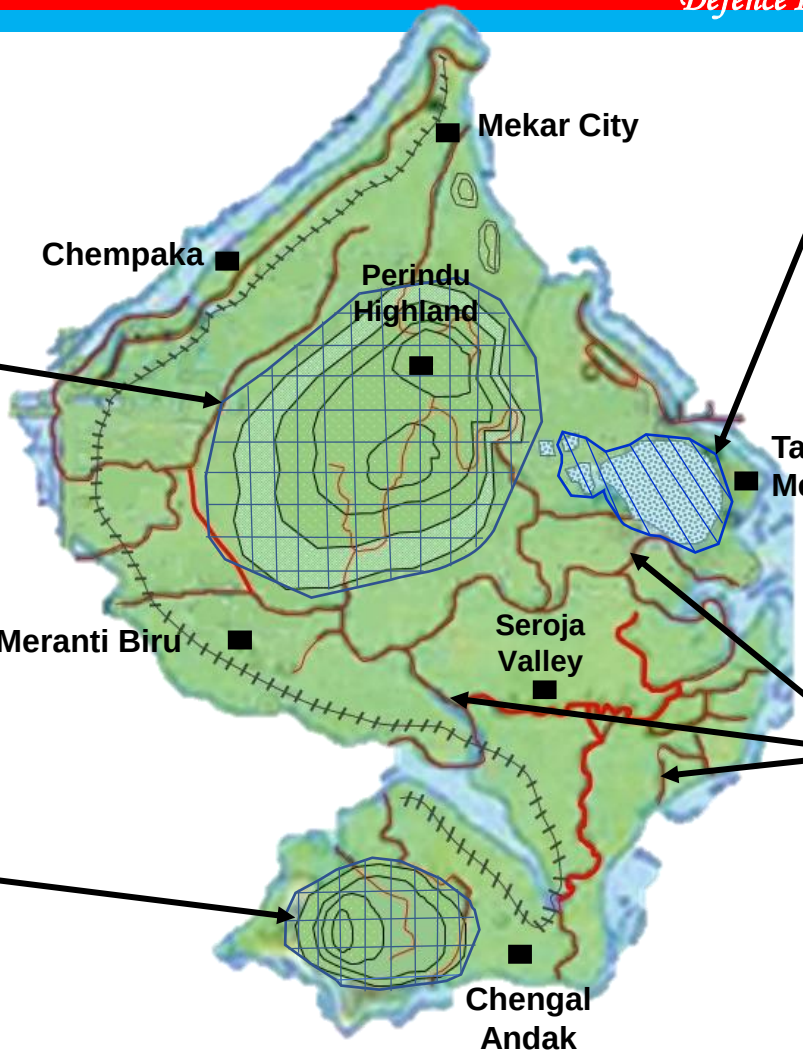
GRAPHICAL OVERLAYS



High features and heavy vegetation. Mostly severely restricted.

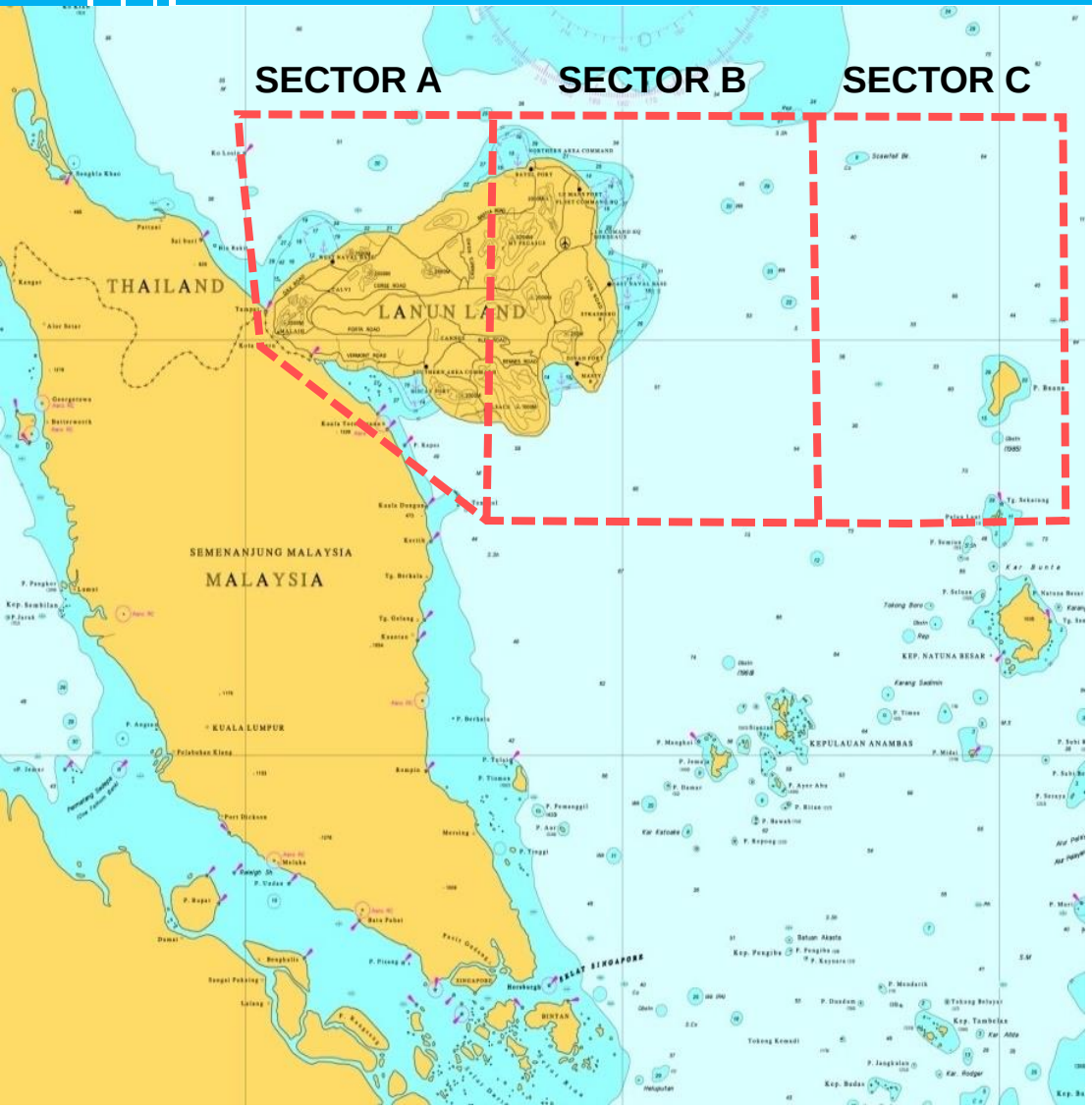
Great lake. Mostly severely restricted.

Roads available:
Highway – 5m.
Federal road – 3.5m
State road – 3.2m
Local road – 3.2m

High features and cover by palm oil plantation. Mostly restricted.

Sample 2-18

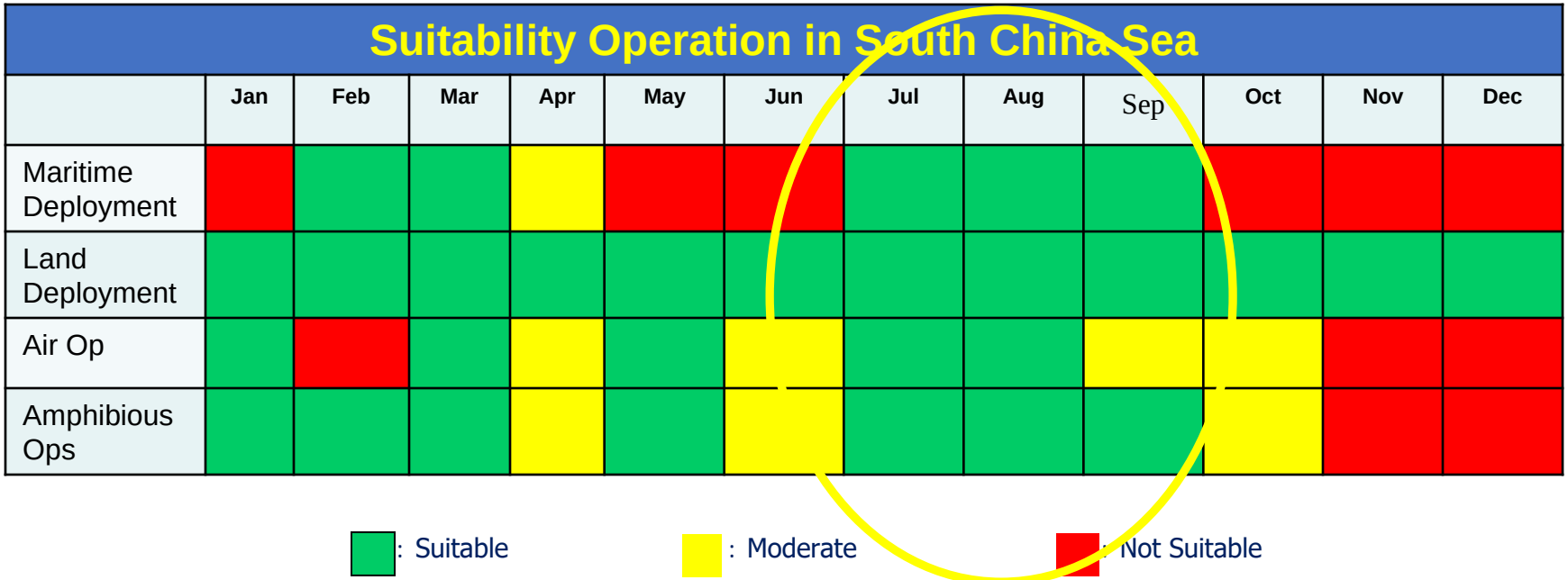
NORMALCY GRAPHICS



DATE	SECTOR		
	SECTOR A	SECTOR B	SECTOR C
APR	110	120	100
MAY	110	110	120
JUN	100	100	130
JUL	100	98	135
AUG	95	90	120

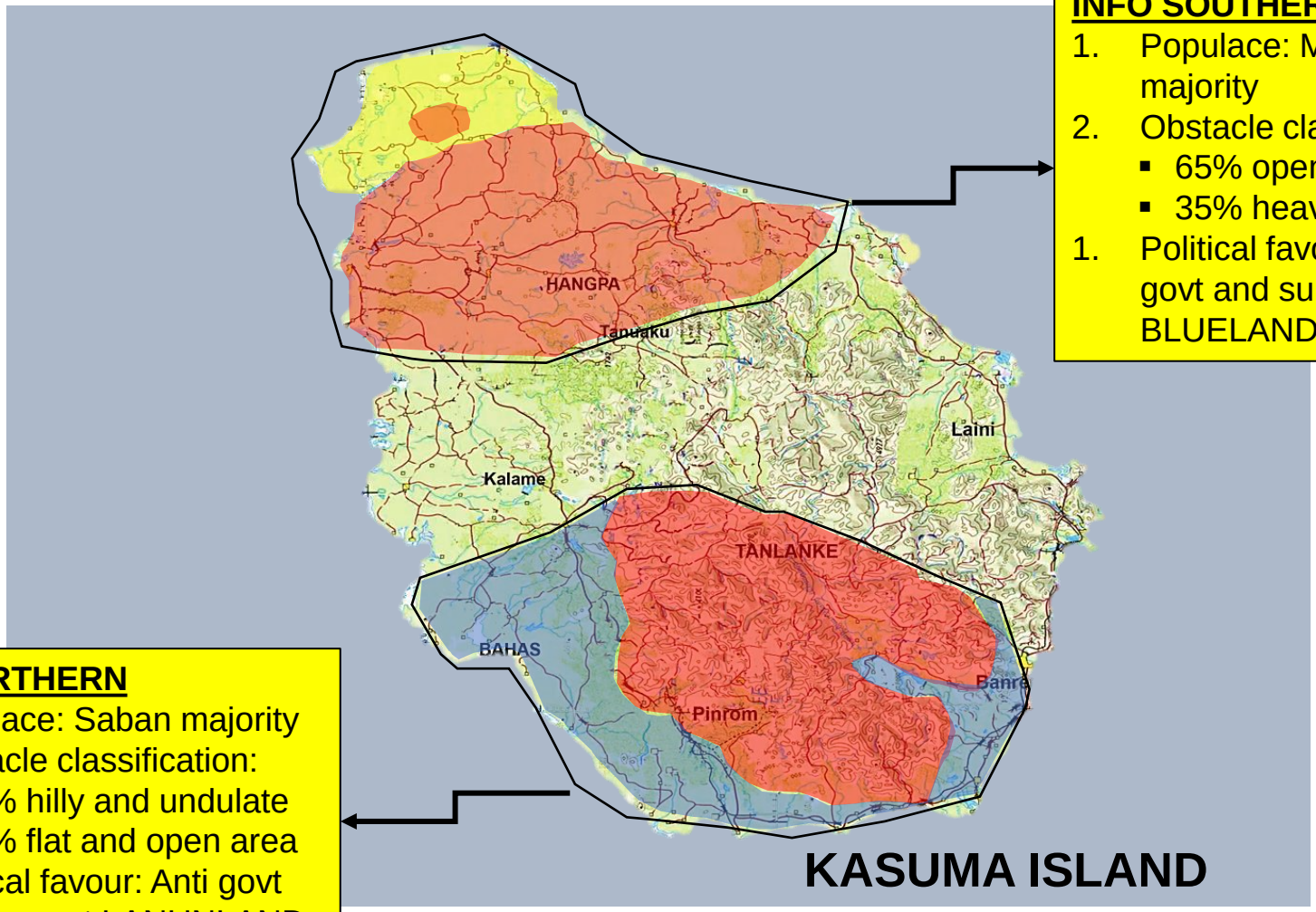
No of Sortie Flown

ENVIRONMENTAL GRAPHIC



Operation Suitability in AO

GRAPHICAL OVERLAY



INFO SOUTHERN

1. Populace: Melakan majority
2. Obstacle classification:
   - 65% open area
   - 35% heavy vegetation
1. Political favour: Favour to govt and support BLUELAND op

INFO NORTHERN

1. Populace: Saban majority
2. Obstacle classification:
   - 70% hilly and undulate
   - 30% flat and open area
1. Political favour: Anti govt and support LANUNLAND op

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JIPOE	
1	Define Operational Environment
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DESCRIBE THE IMPACT OF THE OE

- **Sub Step 1 - Analyse the Physical Characteristics of the Operational Environment**
- **Sub Step 2 - Analyse the Non-Physical Characteristics of the Operational Environment**
- **Sub Step 3 - Summarise Critical Effects and Issues**

1. Define OE
2. **Describe the Impact of OE**
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DESCRIBE THE IMPACT OF THE OE

Analyses the environmental characteristics identified in Step 1 to determine effects on friendly and threat military op in detail

1. Define OE
2. **Describe the Impact of OE**
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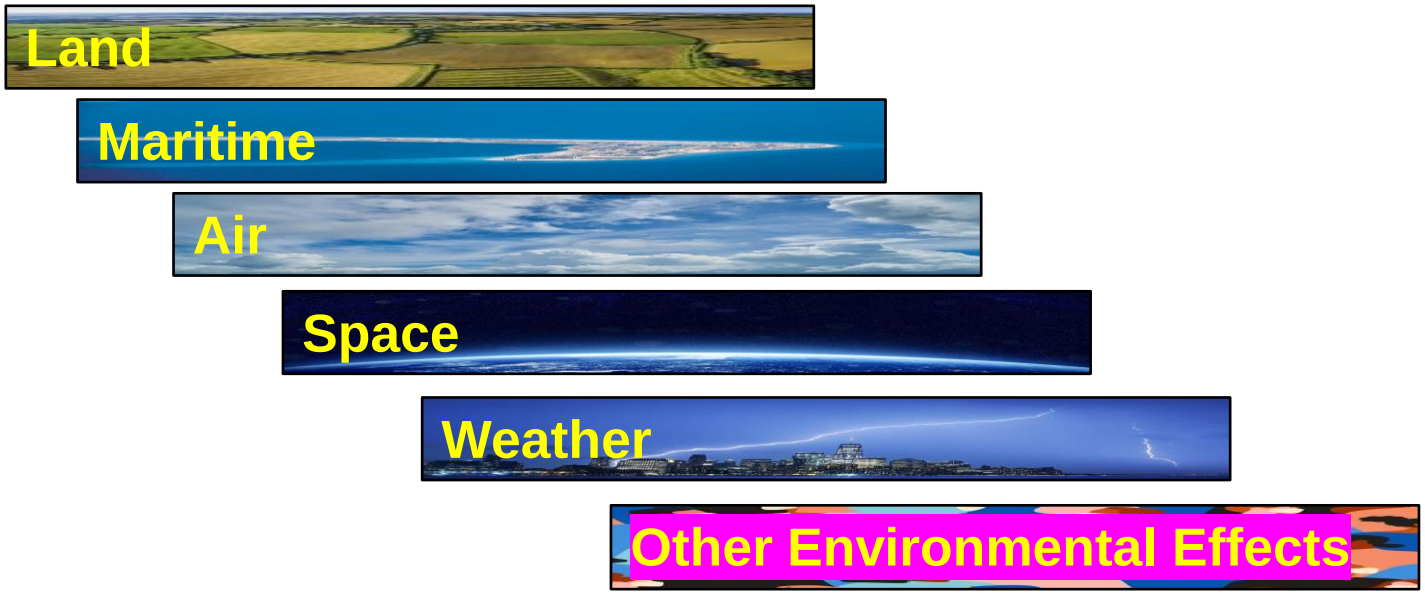
Analyse Physical Characteristics of the OE

J2 predict or model behaviour of environmental threats and make deductions about the impact of these factors and elements on op or friendly forces of the OE dimensions:



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Analyse Physical Characteristics of the OE

Analyse Physical Characteristics of the OE

Land Dimension

- Describe through terrain or topographic analysis
- To determine its effects on military op both friendly and threat
- The most important military aspects of terrain are:
  - Observation and fields of fire
  - Cover and concealment
  - Obstacles
  - Key terrain
  - Avenues of approach

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Analyse Physical Characteristics of the OE

Cont:

- It also includes facts on:
  - Urban areas
  - Factories
  - Railways
  - Logistical nodes
  - Ammo dumps
  - Roads
  - Other land infrastructure
  - LOC

Analyse Physical Characteristics of the OE

Environment	Characteristic		Effects (How the characteristic affect the op)	Deduction (how the effect will influence the op)
Land	O	▪ Identify potential engagement areas ▪ Identify defensible terrain and weapons system positions	Middle east of KASUMA terrain is open ground where manoeuvring forces are most vulnerable to observation and fires	This area will expose the own or threat troops movement to hostile force observation
	FoF	Identify area with a direct line of sight that weapons may cover/fire upon effectively from a given position	Sector B on west are open with a clear view within the firing range of available weaponry. However at north there are 3 Dead Space (ground) within range of weapons that cannot be observed or fired upon	North of Sector B will give advantage to threat if they occupied the particular area
	C	The protection from the effects of weapons fires, direct, indirect, and air to ground	Most of area in south east KASUMA Island plant by palm oil plantation which provide a good cover and concealment	The palm oil plantation area will provide a good cover for own/friendly troops.
	C	Protection from observation, either from the air or from the ground or both		However it's also will give an advantage to threat and jeopardize our fire support plan

Sample 2-1

Analyse Physical Characteristics of the OE

Environment	Characteristic		Effects (How the characteristic affect the op)	Deduction (how the effect will influence the op)
Land	O	▪ Vegetation ▪ Surface drainage ▪ Surface materials ▪ Surface configuration ▪ Obstacles (natural and manmade) ▪ Transportation systems ▪ Effects of actual or projected weather	Huge river of KUANSO will limit the movement of troops	The river will speed down the op momentum and expose troop to hostile force strike
	K	Some terrain feature (natural or manmade) which, if controlled, will give a marked advantage to whoever controls it	3 spot of high ground at Sector C provide with good observation and fields of Fire - transportation choke-points such as a water crossing - mountain gap, or road junction	Its provide good observation and field of fire for both forces
	A	A ground route of an attacking force of a given size leading to its objective or to key terrain in its path	KASUMA road and railway system do not prepared a variety of option to be a good LOC	This situation will limit the available MSR and ASR

Sample 2-1

Analyse Physical Characteristics of the OE

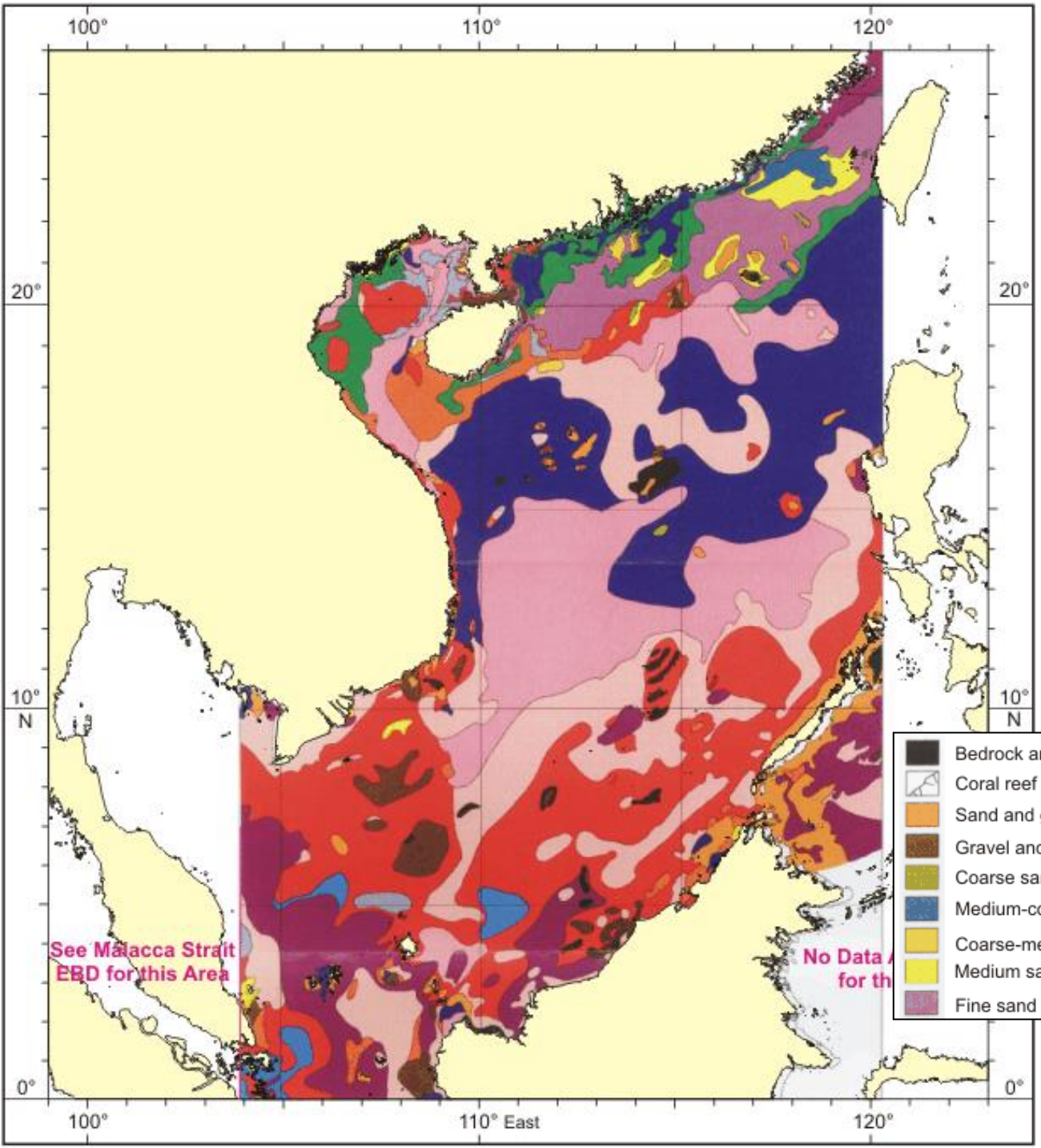
Defence Intelligence Staff Division

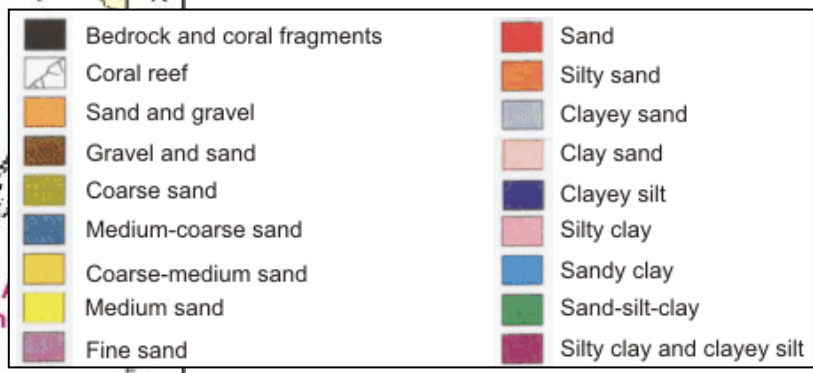
Maritime Dimension

- Pertains to key military aspects of the maritime environment which could impact most notably maritime operations
- This factor include:
  - Manoeuvre space and chokepoints
  - Harbours and anchorages
  - Ports, airfields and naval bases
  - Shipping routes
  - Hydrographic and topographic characteristics of the ocean floor
  - Littoral (beaches, ports, obstacles etc)

SEABED SEDIMENT

- Seabed sediment broadly classified into four sedimentary types, muds, sands, mixed mud and sand
- BLUELAND seabed mostly covered by silty clay and sand that will cause of limited site for amphibious operation
- Generally KASUMA Island AO covered by silty clay and clay sand





Sample 2-3

ANALYSIS PHYSICAL - MARITIME

Sample 2-4

BATHYMETRY

- The bathymetry around the Southwest LANUNLAND Sea is complex, containing numerous islands, seamounts and other underwater features.
- The average depth of the basin is 1212m with the greatest depth of 5277m at the S end of the Manila Trench.
- The major morphologic features of the basin include the continental shelf, continental slope and abyssal plain

ANALYSIS

- Submarine assets can be optimized in AO as the water depth ranges from 85 to 3,236 meters
- Mine laying and sweeping operations are limited
- A lots of shallow water in AO result freedom of manoeuvre limited
- Spratly Island can be staging area or FOB
- LANUNLAND has sufficient ports to sp their op. LANUNLAND has superior number of assets and advanced in technology.

Analyse Physical Characteristics of the OE

Analyse Physical Characteristics of the OE

Air Dimension

- Involves an analysis of all factors of the operational environment that may affect friendly and threat air op
- Threat infrastructure that supports either offensive air operations or defence against air attacks should be analyzed
- Require analysts to consider not only terrain and weather, but aspects such as airspace issues as well

1. Define OE
2. **Describe the Impact of OE**
3. **Evaluate Threat**
4. **Determine Threat COA/ Scenario's**

2a. Analyse Physical Characteristics of the OE
2b. Analyse Non-Physical Characteristics of the OE
2c. Summarise Critical Effects and Issues

Analyse Physical Characteristics of the OE

Cont:

- **This factor may include :**
  - Airports
  - POL aval
  - Aircraft
  - Maintenance & manufacturing facilities
  - Air navigation
  - Air traffic control

Analyse Physical Characteristics of the OE

ENVIRONMENT	CHARACTERISTICS	EFFECTS	DEDUCTION
Aerospace	▪ KASUMA Island have 2 airports facilities	• Air landed op, log built up by air and reinforcement is possible • Airfield can be use as FOB	• 2 airports provide enough facilities for long term military op
	▪ Only 1 aircraft maintenance center developed in KASUMA	• 1 maintenance centre could not facilitate huge military operational requirement	• This centre need to be defend by all means • Aircraft main repair will be provided at current centre at Subang
	▪ Air traffic control at KASUMA National Airport equipped with Flight data processing systems, Short-term conflict alert and Minimum safe altitude warning	• Enhance a controller's situation awareness within his assigned airspace	• This facilities are needed in support of a seamless global air traffic management system during conflict

Sample 2-6

Analyse Physical Characteristics of the OE

Space

- Space-based capabilities include position, navigation, timing, earth observation and communications
- Situational understanding of satellite health and availability are critical to contemporary military activity

1. Define OE
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2a. Analyse Physical Characteristics of the OE
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Analyse Physical Characteristics of the OE

Weather

- The main features of the climate (temperate, cold, arctic, tropic, subtropics)
- Change of seasons; thaw; duration of the day (sunrise, sunset, twilight etc and their general affects on the preparation execution of the forthcoming military action)
- Cloud cover, low ceiling/visibility, fog, precipitation (rainfall, snow etc)
- Winds, waves (high seas - sea state 5 and higher) and surf height
- Temperatures (sea, air, mean and extreme temperatures etc)
- Humidity and its affect on the use of weapons/equipment and fatigue of personnel; thermal crossover and transmissivity
- Precipitation (rainfall, snow etc) and its affect on off-road trafficability; currents, tides etc

Analyse Physical Characteristics of the OE

ISR OPERATIONS		
Elements	**Critical Value**	**Impact**
Ceiling—cloud and sky cover	≤ 200 ft	Engagement range
	≤ 1,000 ft	Aerial observation
Wind	> 60 knots	Equipment damage
Precipitation	>2.54 mm/h	Audio sensors and radar effectiveness
	> 12.7 mm/h	Speed of personnel and equipment movement
	> 50 mm/12 hrs	Speed of personnel and equipment movement; traffic ability and storage of equipment
Thunderstorms and lightning	Any occurrence within 3 nm	Troop and equipment safety; false alarms and false readings
Temperature (Surface)	20 > °C > 50	Emplacement site selection

Sample 2-9

Weather Effect on Amphibious Op

Weather Effect During NE Monsoon						
	Weaponries	**Sensor**	**Comm**	**Mobility**	**Resup**	**Morale**
Capital Ship						
Small Craft						
Support Ship						
Amphibious						
MCM						
Submarine						

Favourable Moderate Not Favourable

Sample 2-11

Other Environmental Effects

- Provide an overview of the other natural phenomena issues that potentially can affect the employment of military forces on both sides
- Issues of natural disaster, hygiene problem, disease or famine
- It may effect morale, the level of personnel and medical support required for op

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Other Environmental Characteristics & Effects

ELEMENT	CHARACTERISTICS	EFFECTS	DEDUCTIONS
Environmental Hazards	• The environment in KASUMA is tropical • A high level of health countermeasures is to be taken by deployed forces	Personnel should be medically fit and extensively immunised against diseases requiring 30 days to complete the process	This could affect the preparations and timing of any significant land deployment
	Thunderstorm and lighting on Apr 17 because of between Monsoon Season	The land will muddy and the weather is rainy	Manoeuvre is restricted and MS BOS is required to standby to be deployed
	• Lots of illegal immigrants from LAN	• Cleanliness and sanitary issue along with the increasing of slums • Unvaccinated children	Need to vaccine mil per with proper vaccination and give awareness regarding health care

Sample 2-11

Analyse Non Physical Characteristics of the OE

- Look beyond the “obvious” geospatial limits of the AO
- A detailed description of the human domain of the OE focused on operational threats
- Involves analysis of communications, media and information technology which govern the distribution and use of information to a population
- Includes an analysis of the effects of the threat information activities on own/friendly forces

1. Define OE
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2a. Analyse Physical Characteristics of the OE
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Human Factors

- Relevant data on international, regional, national socio-political stakeholders
- The main characteristics of the political system (system of government; executive, judiciary, legislature etc)
- Form of government; administrative divisions; legal system; constitutional system and constitutional issues; ruling regime; political parties and leaders; human rights; political stability; internal threats (political extremism, terrorism, insurgency, serious crime/drugs etc)
- Language, social institutions and attitudes and similar factors

Analyse Non Physical Characteristics of the OE

Human Factors Characteristics & Effects

ELEMENT	CHARACTERISTICS	EFFECTS	DEDUCTION
Socio political	- BLUELAND foreign policy based on neutrality and maintaining peaceful relations with all countries	- Limit the aggressive action towards others	- This situation will produce uncertainty within the society support on LAN military aggression
	- LAN Regime unstable political situation	- This leadership crisis will influence LAN strategic decision making	- President of LAN still have an authority to launch military campaign where war still cannot be avoided
	- 35% of main population in LAN sharing a similarity on culture and language as Malaysian	- The society probably will not support their leader strategic decision - This will influence the emotional sensitivity of the people	- Psyop plan will determine degree of support toward LAN leadership and government

Sample 2-12

Information Domain

- Involves analysis of communications, media and information technology, which govern the distribution and use of information to a population
- It may include threat information activities where a capability and intent may exist

INFO CHARACTERISTICS & EFFECTS

ELEMENT	CHARACTERISTICS	EFFECTS	DEDUCTIONS
Information	LANUNLAND have cyber warfare capability	The system created strong wall for LAN from any cyber aggression	Vulnerable to cyber attack and prevent reaction against military onslaught
	KASUMA Island fixed 2 submarine cables from BLUELAND Peninsular and 1 Satellite earth stations	Its provide carry digital data, which includes telephone, Internet and private data traffic	Any disturbance to this facilities will jeopardize the whole comm system
	The latest trend in KASUMA is the Fixed 4G LTE technology	Many KASUMAN who live in rural and remote areas can now access a good telephone and broadband internet service	This will provide best platform to conduct psyop

Sample 2-13

Analyse Non Physical Characteristics of the OE

Threat IO Capabilities and Effects

Capability	Elements	Effects
CORE	EW	- Collections of Information's/Data - Deception (Dummy Radio Network/False Info) - Jamming (Comms & RADAR) ESM: Surveillance, Interception, Direction Finding, Intelligence, Gathering & Analysis, LANUNLANDERS Warning & Threat Warnings EPM: Emission Control, Spectrum Management, Wartime Reserve Mode & Cryptography
	Psyop: - Propaganda	- Ops Against The National Will: Reducing the will of the population - Ops Against Opposing Commanders: Destabilizing the enemy's leadership - Ops Against Tps: Demoralize the enemy troops - Internal Conflict: Create tension among people through political issues/religion/culture
	Military Deception	- Dummy asset/eqpts or installations
	Cyber Warfare	- Espionage and national security breaches - Sabotage (C2 Center, COMCEN, mil eqpts, banking sys, pwr plant, broadcast stn, transportation sys, stock market, economic center etc)
	OPSEC	Identifying essential elements of friendly info & subsequently analyzing friendly actions & other activities

Sample 2-14

Analyse Non Physical Characteristics of the OE

Cont:

Capability	Elements	Effects
SUPPORTING	Information Assurance (IA)	Providing restoration of info sys incorporating protection, detection, and reaction capabilities
	Counter-Intelligence (CI)	Info gathered & activities conducted to protect against espionage, sabotage & subversion
	Protective Security	To safeguard personnel, material & info from espionage, sabotage, damage & theft
	Preventive Security	Neutralizing effectiveness of hostile intelligence efforts & the acquisition of intelligence concerning its organization, motives, intention & mission
	Counterpropaganda	- Preventive : Form of propaganda awareness programs - Counteractions: To reduce or neutralize the effects of hostile propaganda - Rumors: Disseminated talk or opinion

Sample 2-14

ASCOPE/PEMSII Analysis

	P (Political)	**E** (Economic)	**M** (Military/ Police)	**S** (Social)	**I** (Infra)	**I** (Info)
A (Areas)	Political Areas (District Boundary, Party affiliation areas)	Economic areas (bazaars, shops, markets)	Military Areas (Coalition/LN bases, historic ambush/IED sites)	Social Areas (parks and other meeting areas)	Irrigation networks, water tables, medical coverage	Radio/TV/newspapers (where people gather for word-of-mouth)
S (Structure)	Political Structures (town halls, government offices)	Economic Structures (banks, markets, storage facilities)	Military/Police buildings (police HQ, Military HQ locations)	Social Structures (Masjid, restaurants, bars, etc.)	Infrastructure Structures (roads, bridges, power lines, walls, dams)	Info Structures (Cell/Radio/TV towers, print shops)
C (Capabilities)	Political Capabilities (Dispute resolution, Insurgent capabilities)	Economic Capabilities (access to banks, ability to withstand natural disasters)	Military Capabilities (security posture, strengths and weaknesses)	Social Capabilities (Strength of local & national ties)	Infrastructure Capabilities (Ability to build/maintain roads, walls, dams)	Info Capabilities (Literacy rate, availability of media/phone service)
O (Organizations)	Political Organizations (Political parties and other power brokers, UN)	Economic Organizations (Banks, large land holders, big businesses)	Military Organizations (What units of military, police, insurgent are present)	Social Organizations (tribes, clans, families, youth groups, NGO/IGO)	Infrastructure Organizations (Government ministries, construction companies)	Info Organizations (NEWS groups, influential people who pass word)
P (People)	Political People (Governors, councils, elders)	Economic People (Bankers, landholders, merchants)	Military People (Leaders from coalition, LN and insurgent forces)	Social People (Religious leaders, influential families)	Infrastructure People (Builders, contractors, development councils)	Info People (Media owners, mullahs, heads of powerful families
E (Event)	Political Events (elections, council meetings)	Economic Events (drought, harvest, business open/ close)	Military Events (kinetic events, loss of leadership, operations)	Social Events (holidays, weddings, religious days)	Infrastructure Events (road/bride construction, well digging, scheduled maintenance)	Info Events (IO campaigns, project openings, CIVCAS events)

Sample 2-16

Summarize Critical Effects and Issues

- Describe the impact of the characteristic analysed in sub step one and two
- Deduction on how they effect the fol key op aspects:
  - **Mobility**

1. Define OE.
2. **Describe the Impact of OE.**
3. **Evaluate the Threat.**
4. **Determine Adversaries COA.**

2a. Analyse Physical Characteristics of the OE.
2b. Analyse Non Physical Characteristics of the OE.
2c. **Summarise Critical Effects and Issues.**

Summarize Critical Effects and Issues

Cont:

- **Military Capability (own/friendly and threat)**
  - Weapon system and tactics
  - ISR
  - C4
  - Logistics
  - Personnel
  - Targeting

1. Define OE.
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4. **Determine Adversaries COA.**

2a. Analyse Physical Characteristics of the OE.
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2c. Summarise Critical Effects and Issues.

Summarize Critical Effects and Issues

Cont:

- **Information operation**
- **Other critical effects and issues related to key operation aspects**

1. Define OE.
2. Describe the Impact of OE.
3. Evaluate the Threat.
4. Determine Adversaries COA.

2a. Analyse Physical Characteristics of the OE.
2b. Analyse Non Physical Characteristics of the OE.
2c. Summarise Critical Effects and Issues.

SUMMARIES CRITICAL EFFECTS AND ISSUES

ELEMENT	ISSUES	CRITICAL EFFECT
Mobility		
Ground	• BLUELAND coastal areas along the approximately 2,300 km covering the South LANUNLAND Sea in the north and west and the Sulu Sea and Sulawesi to the east. • While its land borders with neighbouring countries is 2,486 km long, covering 2,026 km with 460 km of Borneo and Brunei.	• Mobility corridor focusing on the main streets NW on the west coast. • Bridge across the main routes are the choke point for both parties.
Maritime	• Open sea between the Spratly Islands with BPA / BRJ and East Coast BLUELAND • Shallow waters within an islands and reefs. • SLOCs in SCS between Spratly Islands and BPA / BRJ. • The waves height <1.2m causes the choppy water.	• Few choke point in SLOC. • Shallow water causes the limited operation for submarine mostly in the south of the island group, SCS and coral reefs. • SCS environment and island groups offer FOB and temporary military activities. • Maritime war fighting is expected over the coastal waters and EEZ NW Woody Island. • Air and shipping traffic leads to environment's congestion. • Need on comprehensive ROE.

Sample 2-17

Cont:

ELEMENT	ISSUES	CRITICAL EFFECT
Airspace	• Main ALOC in SCS between AII and BPA/BRJ. • Conflict area is apart from main land	• AC outside the range detection radar. • Difficulties in identifying an aircraft. • Aircraft may masquerade as civil aircraft. • AAR require to distance flights.
Military Capability		
C4	• Deception for offensive manoeuvre must be fully coordinated at highest tac HQ for coordination of disguising LANFOR mov (no redundancy and leaking)	•LAN has sophisticated secure communications, will provide sufficient collection opportunities and capability of operating with C3 throughout the AO
Targeting	• LANFOR will destroy the BLF bases/ports/supply depot to disrupt BLF operation.	• BLUELAND not capable to launch any military operation.
Logistic	• Using civ airports and ports as necessary to support any mil op.	• Time taken to support the mil op
Personnel	• Less exercise conducted within the dispute area to get BLUELAND's mil pilots familiar with the area.	• Most of the ac sqn with the man power are from west BLUELAND. If the conflict prolong, it will demoralize the men.

Sample 2-17

KEY PRODUCTS OF STEP 2

- Physical characteristic graphics (Combination Graphics, normalcy graphic, environmental graphic, etc)
- Descriptions of applicable non-physical characteristic of the OE (Human factors, IO, etc)
- Summary of critical effects and issues describing the impact of both characteristics the OE on key operational aspects
- JIPOE Brief on Step 2

1. Define OE.
2. **Describe the Impact of OE.**
3. **Evaluate the Threat.**
4. **Determine Adversaries COA.**

KEY PRODUCTS OF STEP 1 AND STEP 2

Step 1: Define Operational Environment

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Step 2: Describe the Impact of OE

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ANALYSIS OF THE OPERATIONAL ENVIRONMENT (AOE)

1. Define Operational Environment.
2. Describe the Impact of OE.
3. Evaluate the Threat.
4. Determine Adversaries COA.