



**MALAYSIAN JOINT WARFARE CENTRE
(PESAMA)**



INTRODUCTION TO INTELLIGENCE PREPARATION OF THE OPERATIONAL ENVIRONMENT (IPOE)

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IPOE - Step 1

Define the Operational Environment



STEP 1: DEFINE THE OPERATIONAL ENVIRONMENT

Acty 1. Identify availability of time

Acty 2. Identify key environmental characteristics

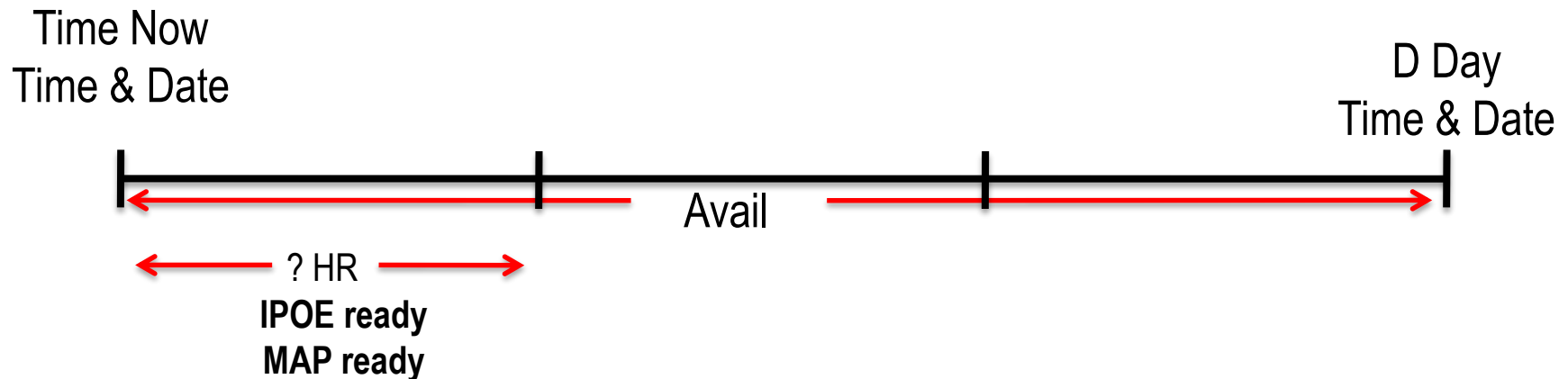
Acty 3. Identify AO & AI

Acty 4. Determine IR & make assumption



ACTY 1: IDENTIFY AVAILABILITY OF TIME

- ❑ Dev using reverse planning app
- ❑ To determine:
 - the time avail for the IPOE process
 - details req in the period of time





ACTY 1: IDENTIFY AVAILABILITY OF TIME

- ☐ Time is always a limitation factor
- ☐ Time avail for IPOE process is dependent on the requirement for Int input into MAP
- ☐ MAP method chosen will determine how much time avail for IPOE process
- ☐ The time avail will determine the way of IPOE process conduct



ACTY 1: IDENTIFY AVAILABILITY OF TIME

- ☐ Must seek for commander guidance IOT determine how detail the IPOE product req
- ☐ It is stressed that IPOE is ongoing process & will cont throughout as an IR determined

REMEMBER!!!

- ☐ Prioritise efforts into what matters to the Commander
70% solution on time is always better than 100% to late



ACTY 1: IDENTIFY AVAILABILITY OF TIME

☐ THE ABBREVIATED IPOE PROCESS

- ❖ Situationally tailored to sp the commanders's reqmt given time constraints.
- ❖ The fol gen methods can be used to abbreviated the process;
 - Disregard those IPOE process or products that are not req to sp the commander's decision
 - IPOE Steps 1,2 and 3 only need to be conducted in full at beginning. This step only req revision provided that the operational environment, weather and threat remain constant



ACTY 1: IDENTIFY AVAILABILITY OF TIME

THE ABBREVIATED IPOE PROCESS

- IPOE Step 2 and 3 are dependent of each other, and when needed to be conducted, can be simultaneously before being integrated in Step 4
- Conducted based on which MAP method conducted
- Deliberate MAP / SMAP - Full IPOE should be conducted
- Quick MAP / IMAP
- Concentrate only on AO
- Only produce MCOO overlay
- Only dev MLCOA and MDCOA
- Display the two en COA on one Sit Overlay and use same overlay as Event Overlay



ACTY 2: IDENTIFY KEY ENVIRONMENTAL CHARACTERISTIC

- Identify factors that will influence ***threat*** or ***friendly*** courses of action
 - **Physical Terrain**; Geography, infrastructure and weather
 - **Human Terrain**; society, politics, religion, economy
 - **Information Terrain**; flow of information throughout the AO

*How it influence ours & En COA?



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PHYSICAL TERRAIN FACTORS

Geography

- Elevation data
- Soil Composition
- Hydrological data
- Vegetation

Weather

- Visibility
- Wind
- Precipitation
- Cloud cover/ceiling
- Temperature
- Humidity



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PHYSICAL TERRAIN FACTORS

Areas and Infrastructure

- Government Centers
- Agricultural/mining regions
- Trade routes and commercial zones
- Industrial zones
- Displace civilian sites
- Comm towers
- Power plants
- Dams
- Religious/historical building
- Hospitals
- Jails
- Warehouses
- TV and Radio Stations
- Tunnels/Bridge
- Street and urban patterns
- Transportation
- Fuel
- Health Services

HUMAN TERRAIN

- Population
- Education
- Religion
- Health
- Legal
- Political
- Economics
- Society
- NGOs
- Local Authorities



INFORMATION TERRAIN

Is an understanding of the information domain and the flow of information throughout the AO

- Civilian systems
- Threat systems
- Flow of information
- Comms HF/VHF
- Transportation systems



ACTY 3: IDENTIFY AO & AI

Area of Operations (AO)

The geographical area over which the commander has been assigned the responsibility and authority to conduct military operations

- ❑ Analyse the msn & Comd's Intent
- ❑ The limits is determined by the max capability of a unit to acquire tgt & physically dominate the en
- ❑ Bdry is normally specified in the OpO fm higher comd HQ



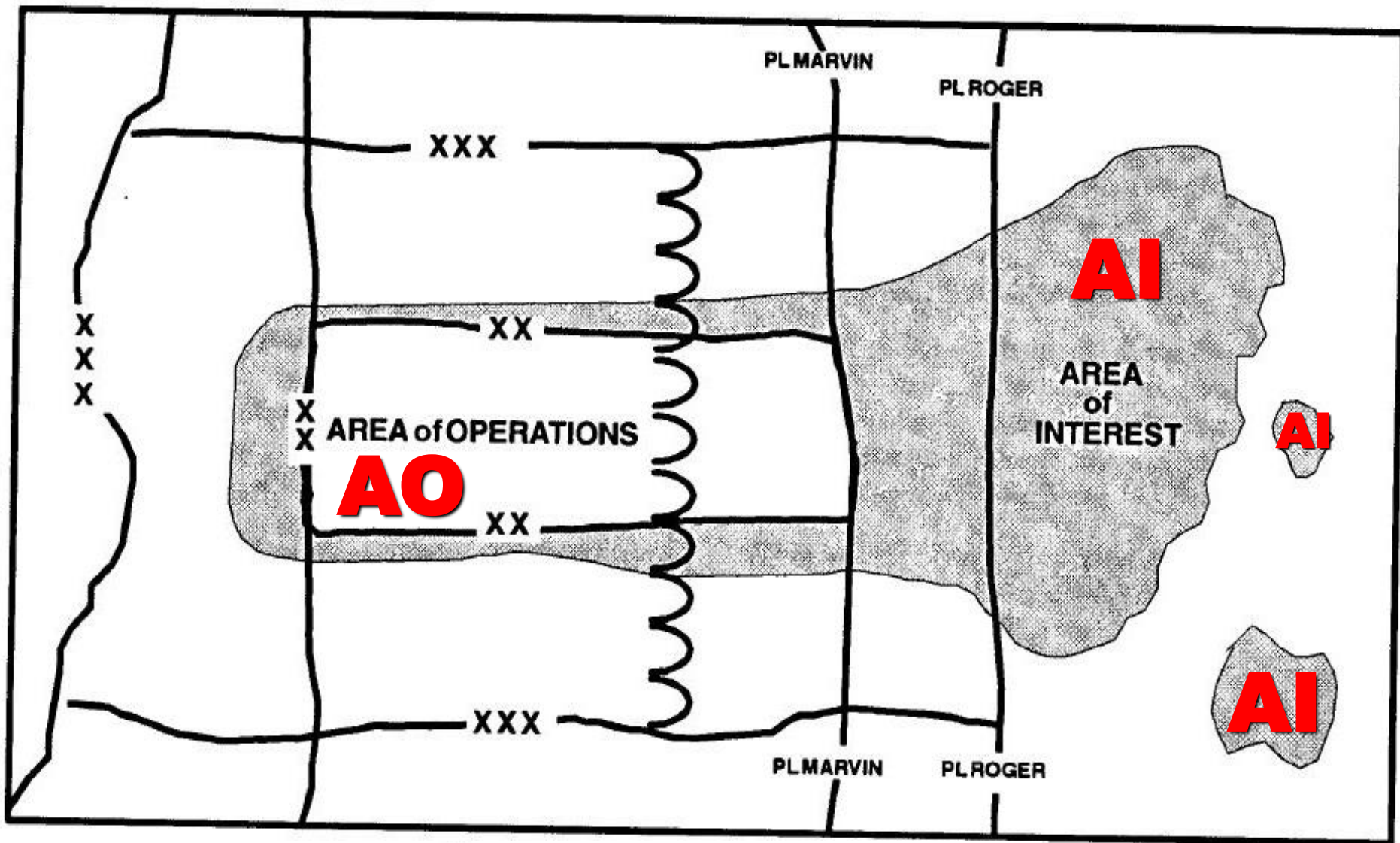
ACTY 3: IDENTIFY AO & AI

Area of Interest (AI)

- ❑ Area of concern to the commander, incl the area of influence, areas adjacent thereto and extending into en territory the obj of current or planned ops. If occ by en, could jeopardize the accomplishment of the msn
- ❑ Geographic area from which information and intelligence are required to execute successful operations (focus Intelligence assets to provide I&W). Defined by:
 - Friendly Forces Loc
 - Anticipated Future Task Loc
 - En Forces able to project combat power or move into the AO



ACTY 3: IDENTIFY AO & AI





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ACTY 4: DETERMINED IR & ASSUMPTIONS

Intelligence Requirement

Specific questions about a threat's Order of Battle (ORBAT), deployments and intentions and local environmental conditions

Information Requirement

Those elements of information which need to be collected and processed to meet the IR

Promulgated to subordinate units and formations in the RSI collection plan



EXAMPLE OF IR

Info req on the en & environment.

- ▣ Where is the en possible res loc?
- ▣ Where is the en possible cbt sp loc?
- ▣ Where is the en possible gun posn?
- ▣ What is the cond of br in AO?



ACTY 4: DETERMINED IR & ASSUMPTIONS

ASSUMPTIONS

- ☐ In reality – Some IR may not be able to be completely answered
- ☐ Must be made to keep the planning process moving
- ☐ Must be listed & briefed to comd for verification
- ☐ If any assumption proves to be false assessments and
- ☐ decisions based on that assumption must be re-examined
- ☐ Must be continually reassessed as IR are fulfilled



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STEP 1: OUTPUT

- ▣ TIMELINE – AVAILABILITY OF TIME
- ▣ KEY OPERATION ENVIRONMENT FACTORS
- ▣ AO / AI OVERLAY
- ▣ INITIAL IR AND ASSUMPTIONS
- ▣ INITIAL RSI PLAN



HOW

to conduct IPOE?

1 Define the Operational Environment

2 Describe the Operational Environment Effects



Clarification and Questions