Establishing Electromagnetic Order of Battle Requirements for Division Planning

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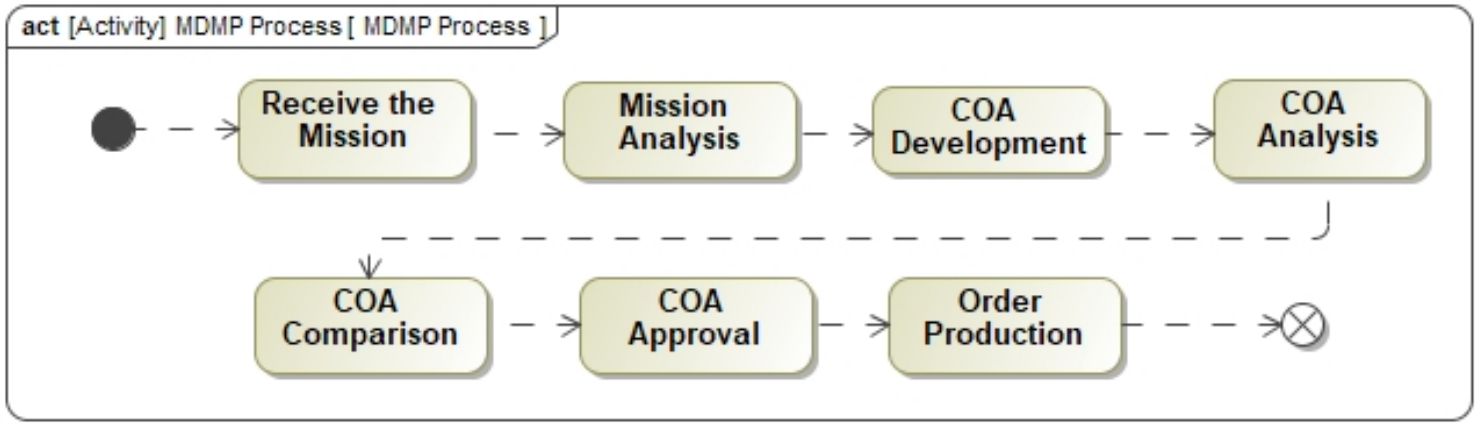
Background

EOB – is a subset of the overall order of battle that consists of the identification, strength, command structure, disposition, and operating parameters of the electromagnetic spectrum dependent systems (JP 3-85).

- Electromagnetic Warfare (EW)
- Intelligence Preparation of the Battlefield (IPB)
- Division Planning
- Multi-Domain Operations (MDO)



Purpose

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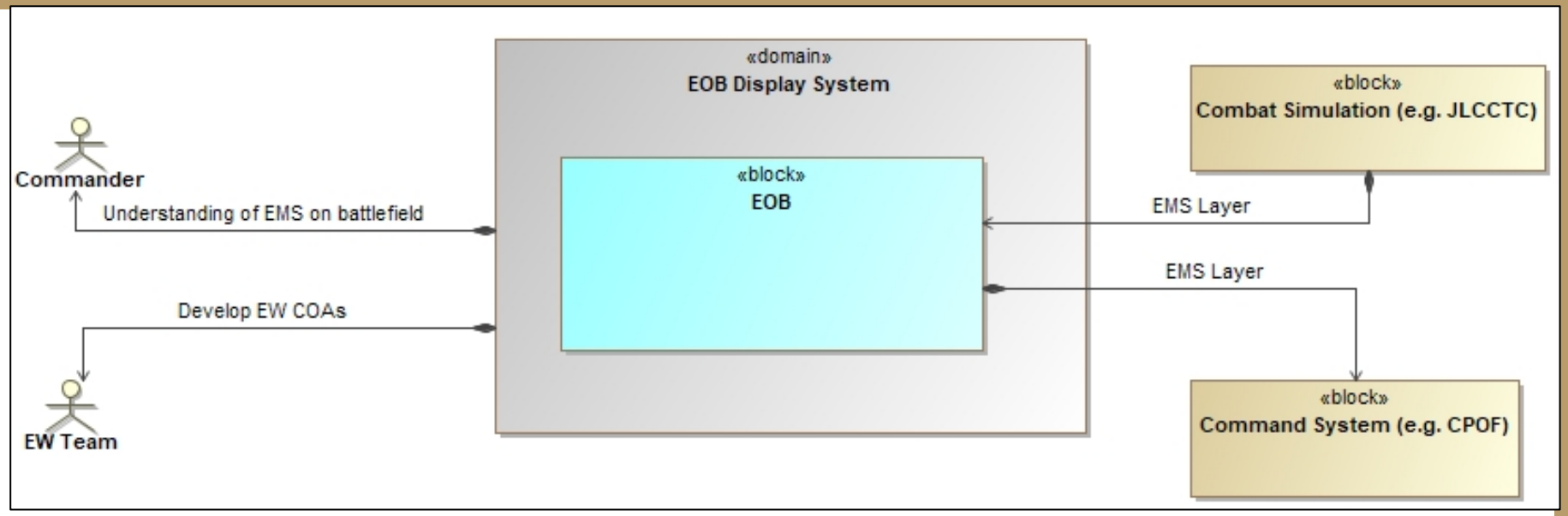
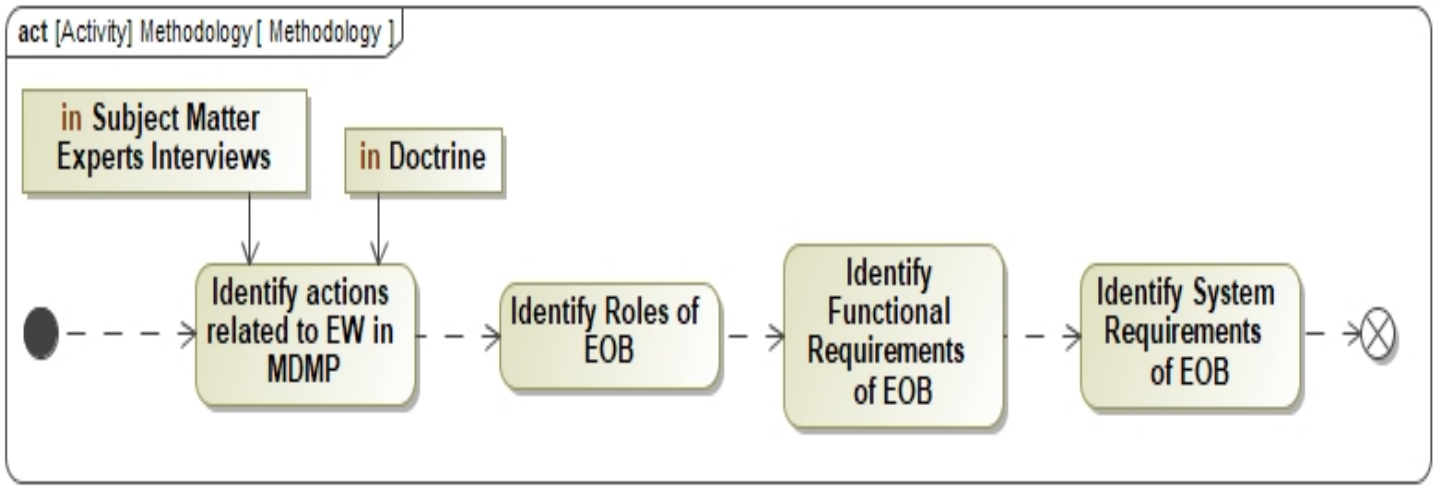
To determine objective and threshold requirements of an EOB.



Methodology

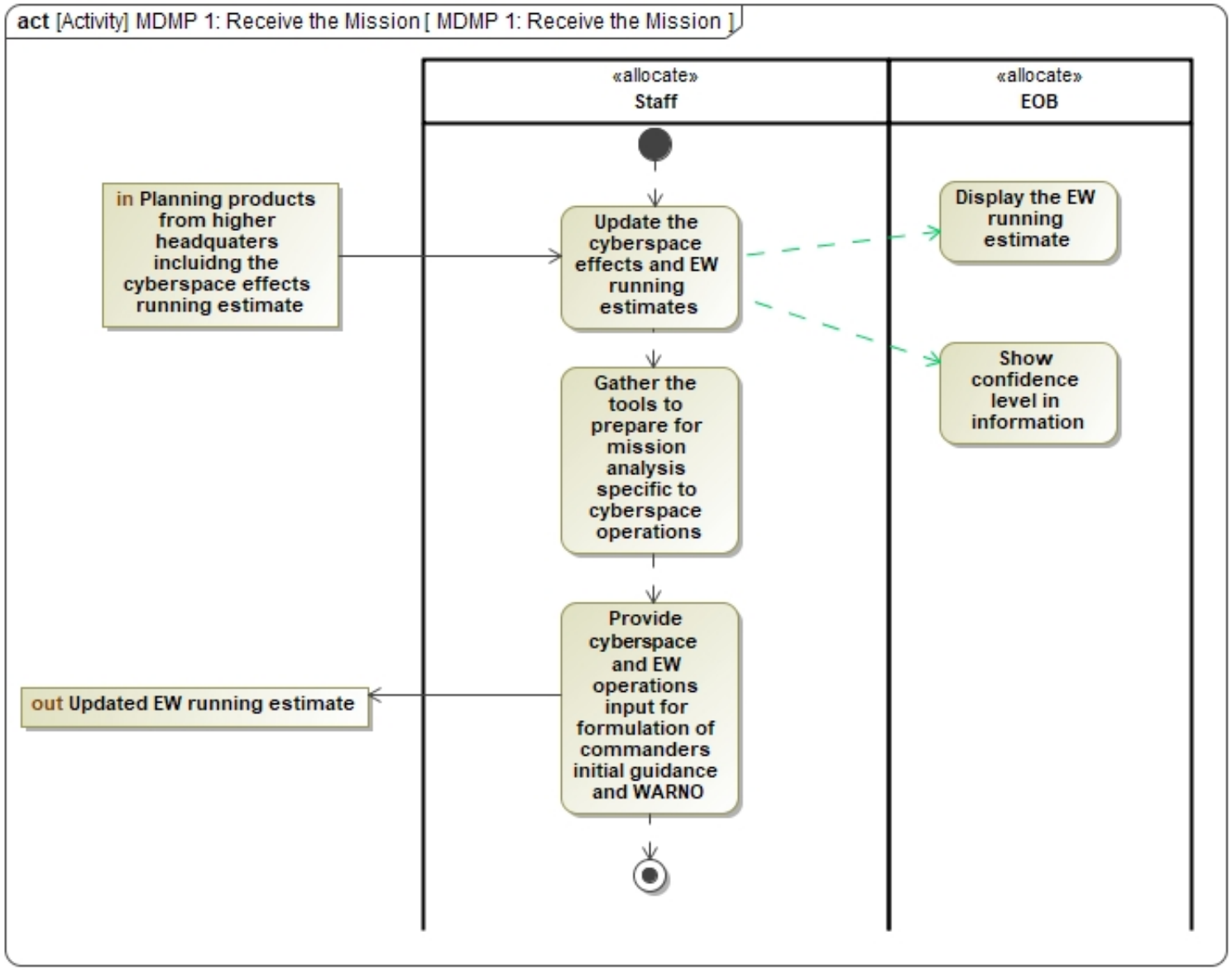
How can we convey the electromagnetic spectrum (friendly and enemy) to key leaders for military planning purposes?

- Consult with subject matter experts
- Identify division planning actions that will use the Electromagnetic Order of Battle
- Generate steps that are required for EOB to allow staff to perform steps
- These information requirements informed the functions that would be performed by the EOB
- Identify functional requirements for the Electromagnetic Order of Battle



Step 1 – Receive the Mission

- Receive the Mission
- Key tasks
  - Identify Friendly and Enemy EW assets
  - Begin IPB process
- EOB
  - Display EW running estimates
  - Show confidence level in information



Step 2 – Mission Analysis

Identify and develop h

Identify vulnerabilities
neutral actors.

l agents on

mposition, and

Determine cyberspace
constraints

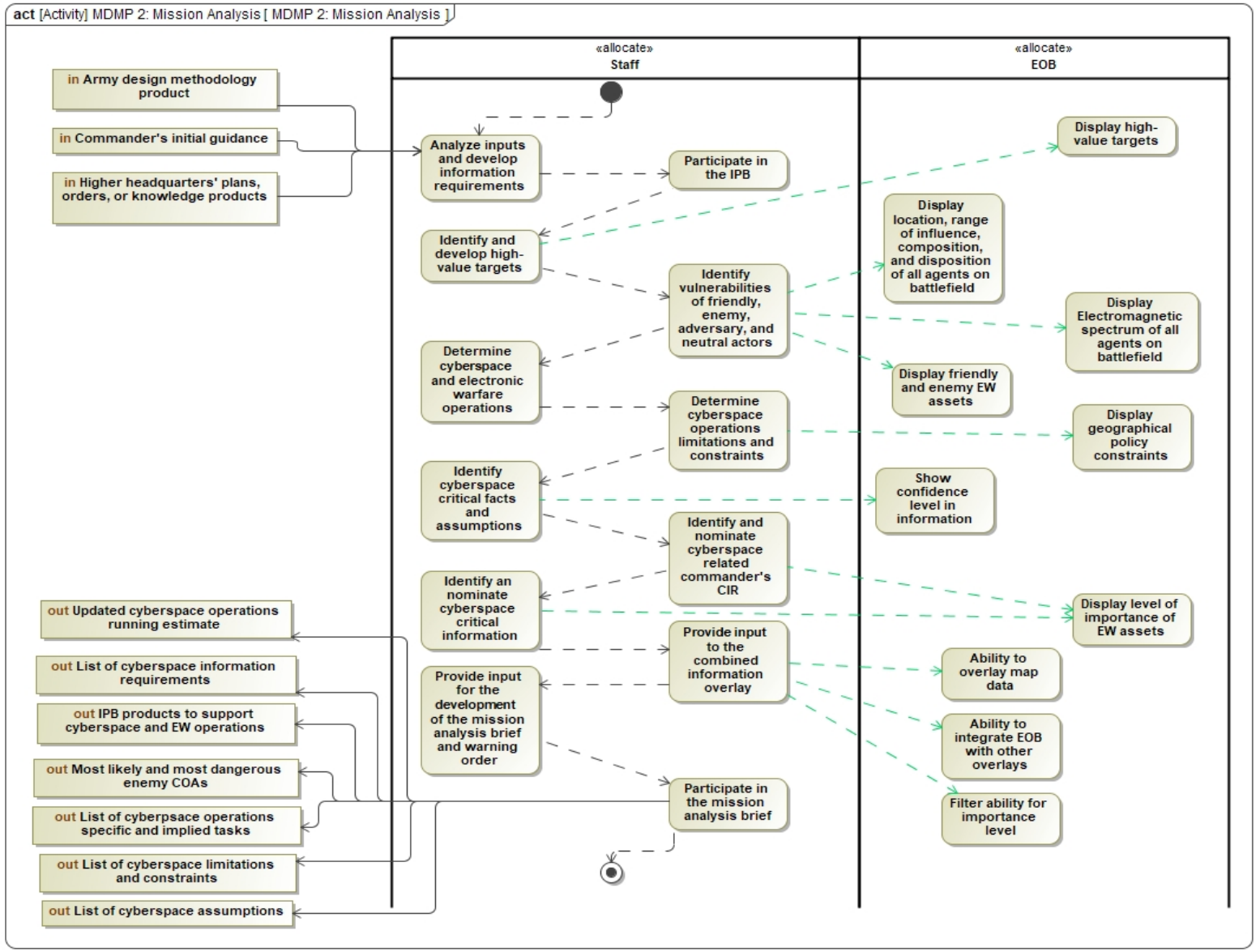
Identify cyberspace cri

Identify and nominate

ts

Provide input to the cc

rlays



Step 3 – COA Development

Integrate and synch
scheme of ma

Analyze high-value

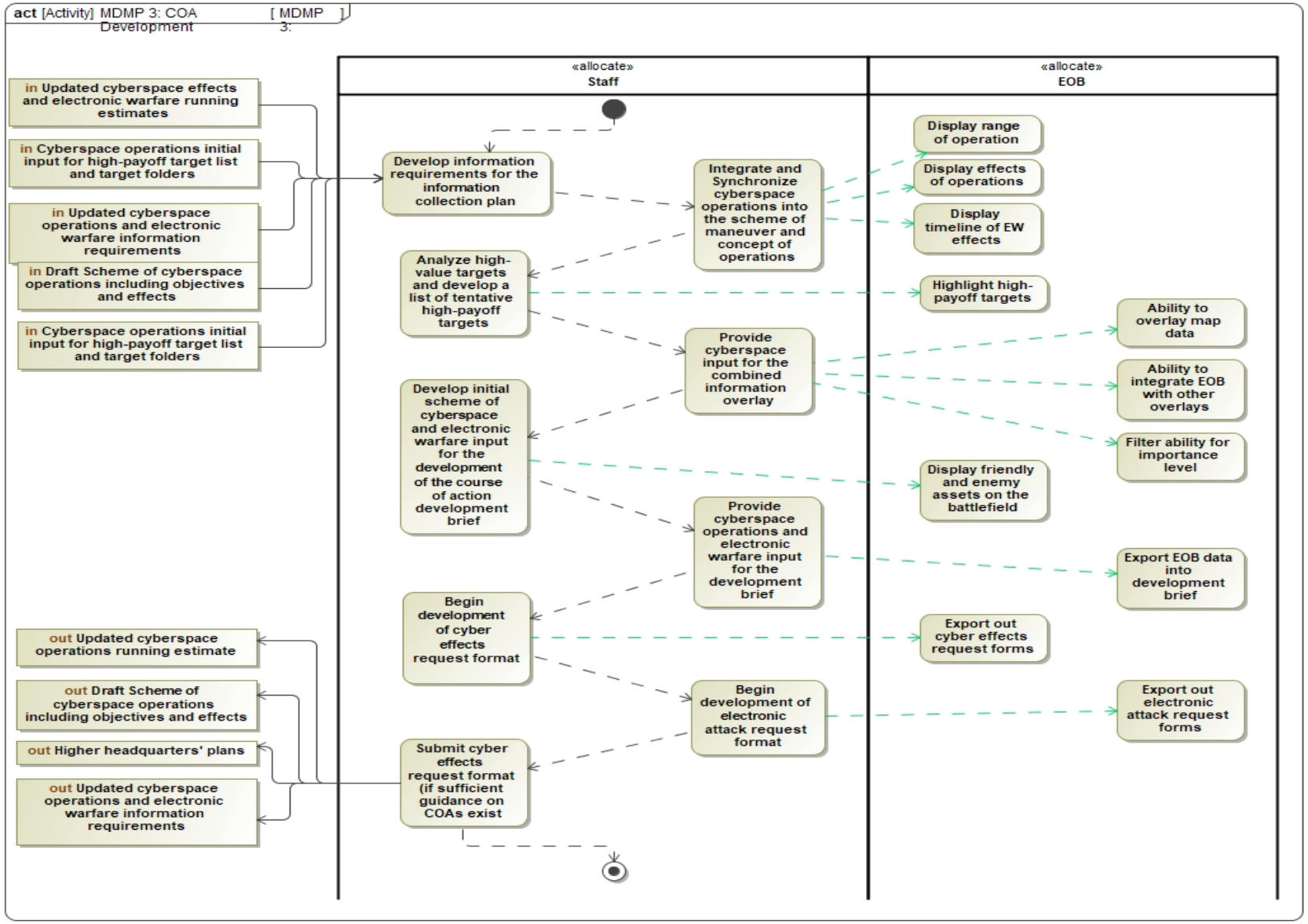
Provide cyberspac

Develop initial sch
the developm

Provide cyberspa
input f

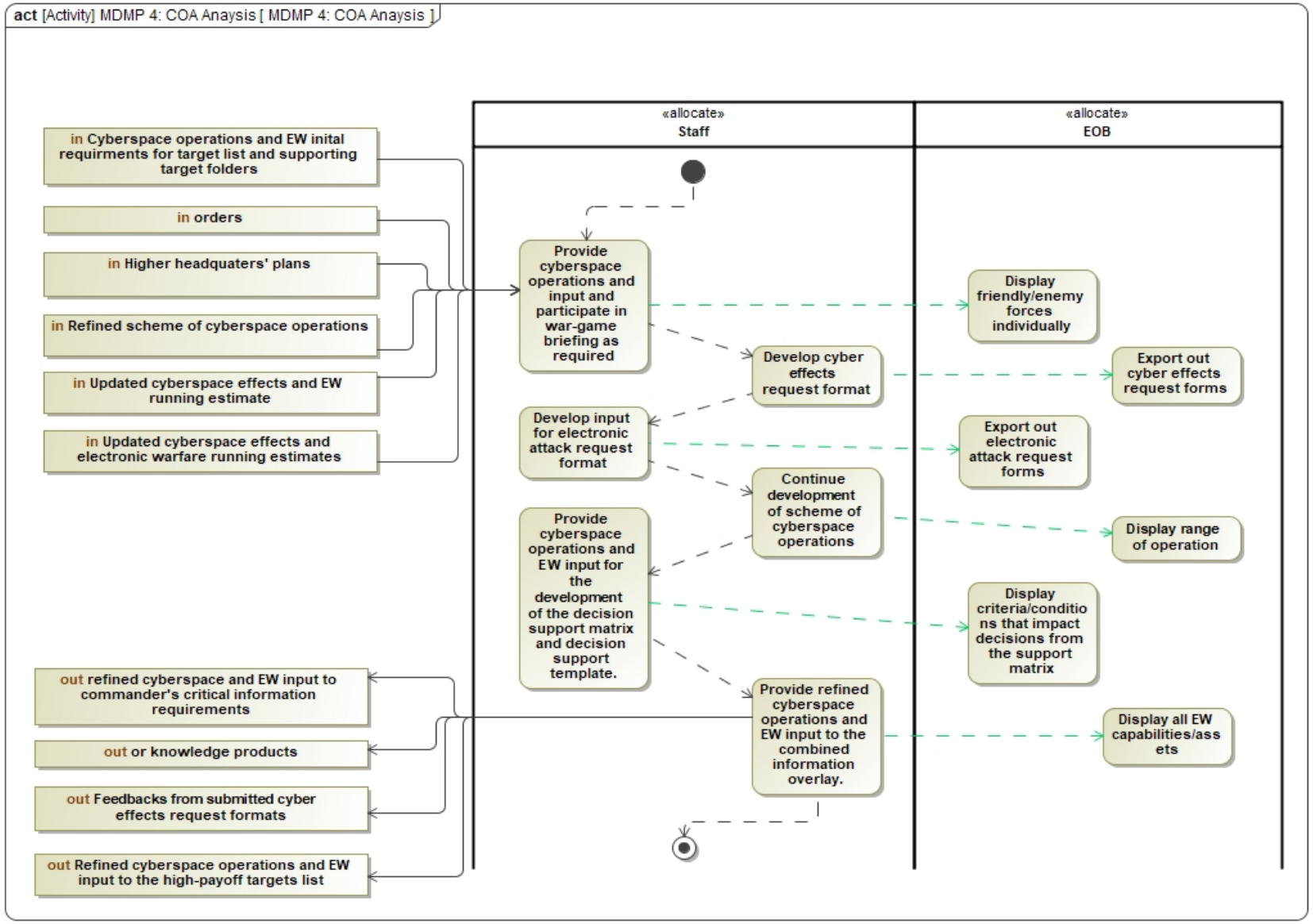
Begin develop

Begin developme



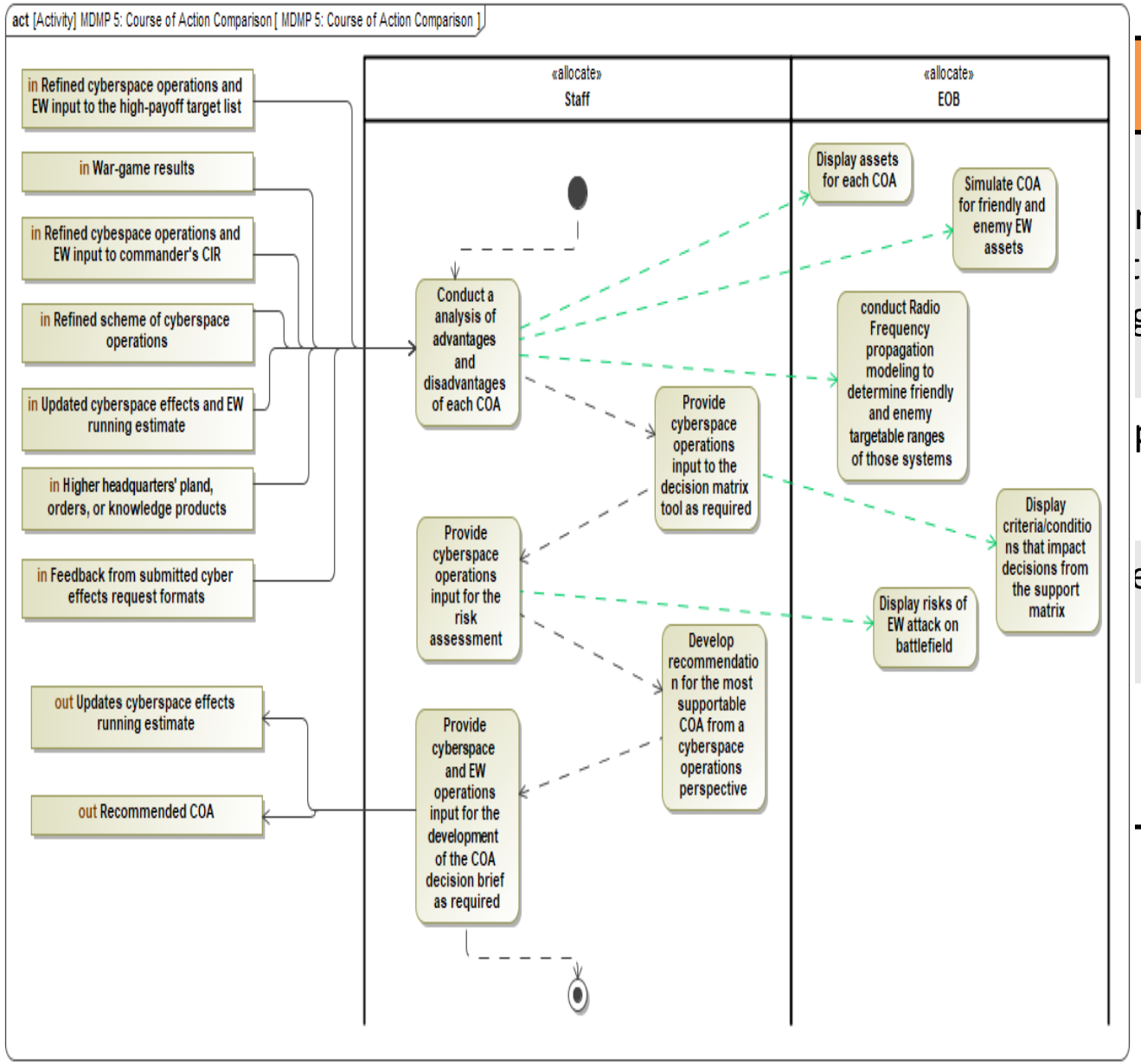
attlefield

Step 4 – COA Analysis

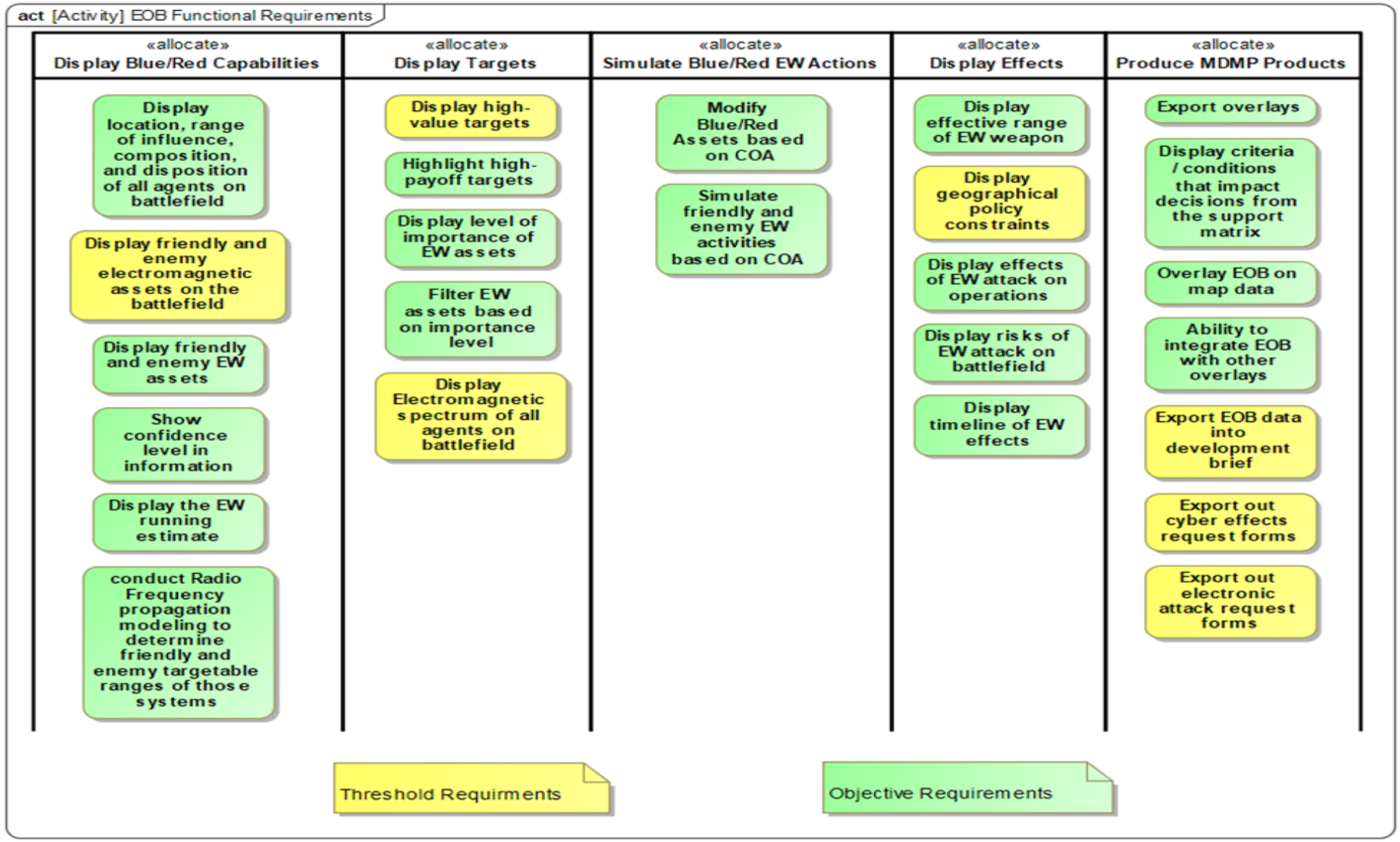


Steps 5-7 COA Comparison, Approval, Order Production

Sta	
Conduct an analysis of advan each COA	my EW assets :ion modeling to getable ranges of
Provide cyberspace operatior matrix tool as required	pact decision from
Provide cyberspace operatior assessment	efield
Produce operations order pro	



Functional Requirements for EOB



Threshold Requirements

1. Display Targeting Priorities following the Joint Integration Priority Target List (JIPTL).
2. Display the capabilities and effects of relevant EW assets pertaining to an Area of Operation (AO).
3. Display geographical and policy constraints pertaining to an AO.
4. Integrate EOB data into current and future simulations and mission command systems.

Future Actions

- Further derive requirements and definitions.
- Transition focus from functional requirements to technical requirements.
- Research current and future EW systems and simulations to avoid unforeseen requirements.

Questions?

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