



White Paper

Common Operation Picture (COP)

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Mission

The Royal Thai Armed Forces Headquarters (RTARF HQ) is responsible for commanding, controlling, directing and supporting all of the Royal military forces in Thailand, in preparation for defense and in execution of the Ministry of Defense's orders with the highest efficiency. There has been a recent renovation on their control system (C4I) towards a Network Centric Operation (NCO) which is good for joint operations, combining different army forces and integrating different levels of work from ground soldier operations all the way up to strategic warfare planning.



Figure 1 : Common Operation Picture (COP)

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Common Operation Picture (COP) is a central system, combined with existing systems of the Marines, Air Forces, Border Defense, etc. It provides a quick and efficient data interpretation on mapping services and remote connection to relevant technologies in Real-time, implementing standard military symbols and data formats. In short, it is an accurate data visualizer, used to support the decision making of the person in command.

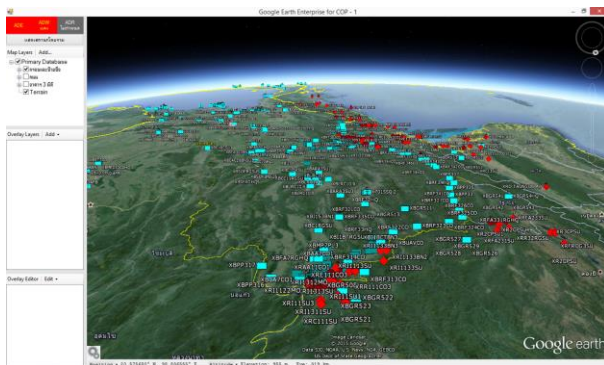


Figure 2 : Common Operation Picture (COP)

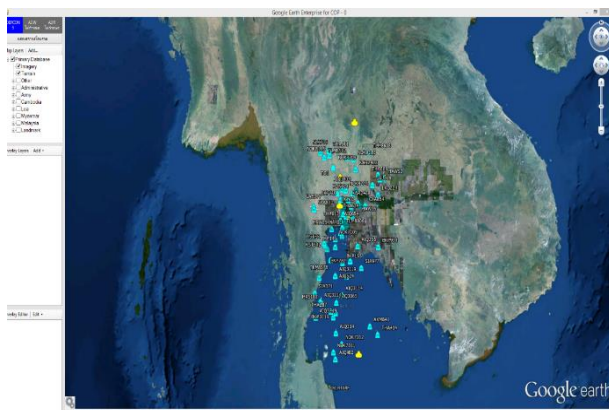


Figure 3 : Common Operation Picture (COP)

The COP system mainly consists of :

- COP Presentation Framework
- High/Low Speed Data Distribution Service
- Multi-Function Console
- Mobile Multi-Function Console
- Radio Low/High Bandwidth

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Operating with the following features :

- 2D/3D Map Display
- Military Symbol
- Multiple Data Formats supports, including JTLS and DR-172 Radar formats
- Low/Limited Bandwidth for Radio Communication
- High-Speed Data Distribution Bus – HSDDB
- Data Distribution Service (DDS) for Real-Time Data Management
- Multi Touch Screen on Multi-Function Console (MFC) and Mobile Multi-Function Console (Mobile MFC)
- Voice and Data Radio



Figure 4 : Multi-Function Console (MFC)

COP purpose to scope on Joint Tactical Data Link for Network Centric Operation which will support strategic mission and tactical operation base on Joint Air Defense, Blue Force Tracking, Search and Rescue which support;

- Realtime Target Tracking
- Tactical Operation Planning
- Armed Force Command
- Tactical-Based Communication

The development of COP is a success project of RTARF mission, the operation functions are become a powerful tools support for Annual Joint Military Exercise for Royal Thai Airforce , Royal Thai Army and Royal Thai Navy.



Figure 5 : Mobile Multi-Function Console (Mobile MFC)



Figure 6 : Radio Modems