

SENSOR SYSTEMS AS A FORCE MULTIPLIER

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MEETING TOMORROW'S CHALLENGES

A world in constant change

Sensor networking

The influence of the curvature

Securing army, navy, air force operations

Reclaiming the distance

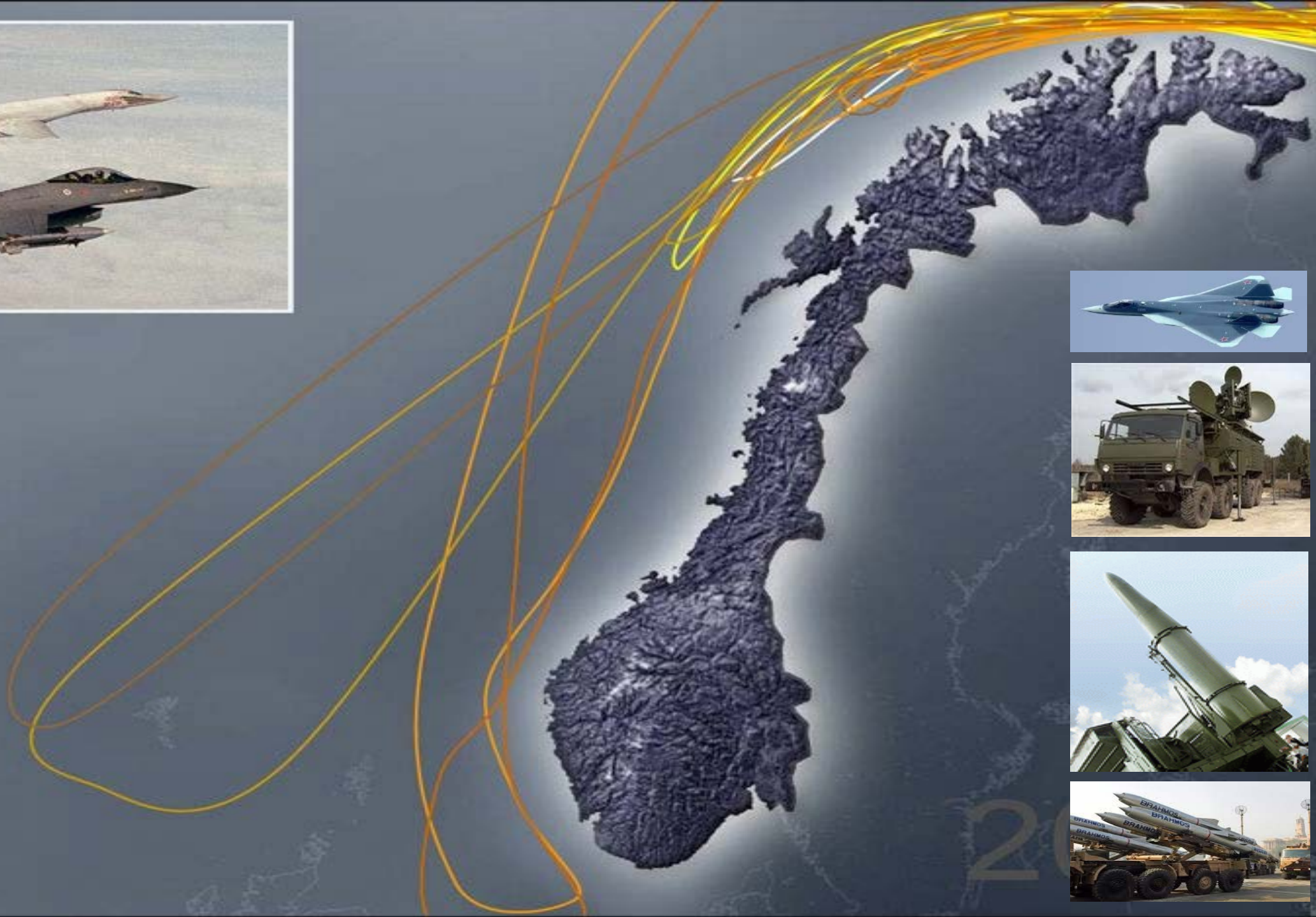
Utilizing effectors range



NEW TYPES OF CONFLICTS AND THREATS

- The threats of today are located in all domains.
- Territorial protection and protecting economic zones.
- Asymmetric conflicts and actions.
- Threats continuously evolve, targets more difficult to detect (smaller, faster or slower and more lethal).
- New advanced threats in the areas of jamming and cyber.



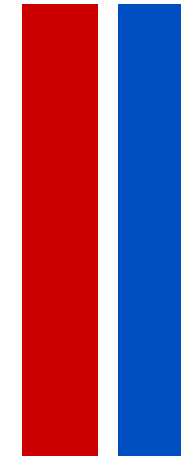


RECLAIMING THE DISTANCE

- Yesterday's targets gave you time to react.



Target distance



Target detection



RECLAIMING THE DISTANCE

- Yesterday's targets gave you time to react.
- Today's less visible targets do not



Target distance



Target detection



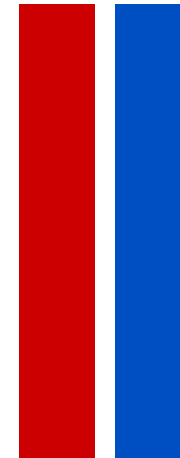


RECLAIMING THE DISTANCE

- By using new and more powerful sensor technology you can reclaim the detection range and time to react also in jammed situations.



Target distance

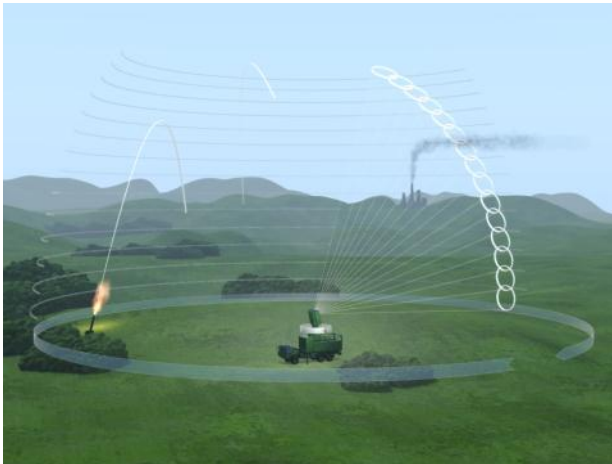


Target detection

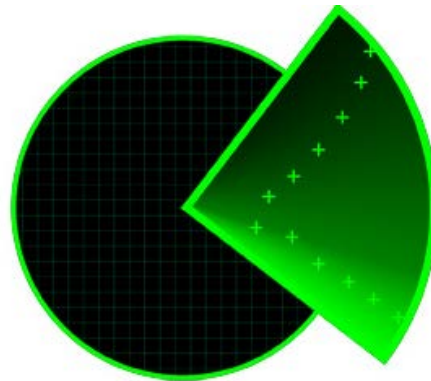
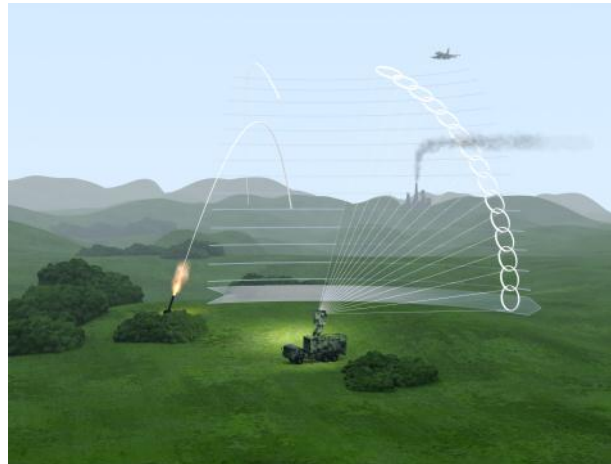


MULTI-FUNCTIONAL CAPABILITIES

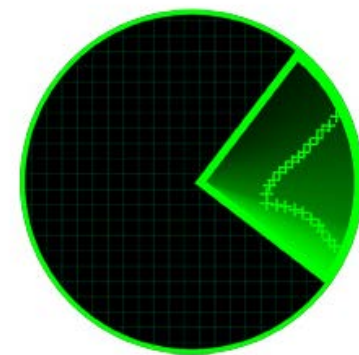
VOLUME SEARCH
ROTATING



VOLUME SEARCH
NON-ROTATING

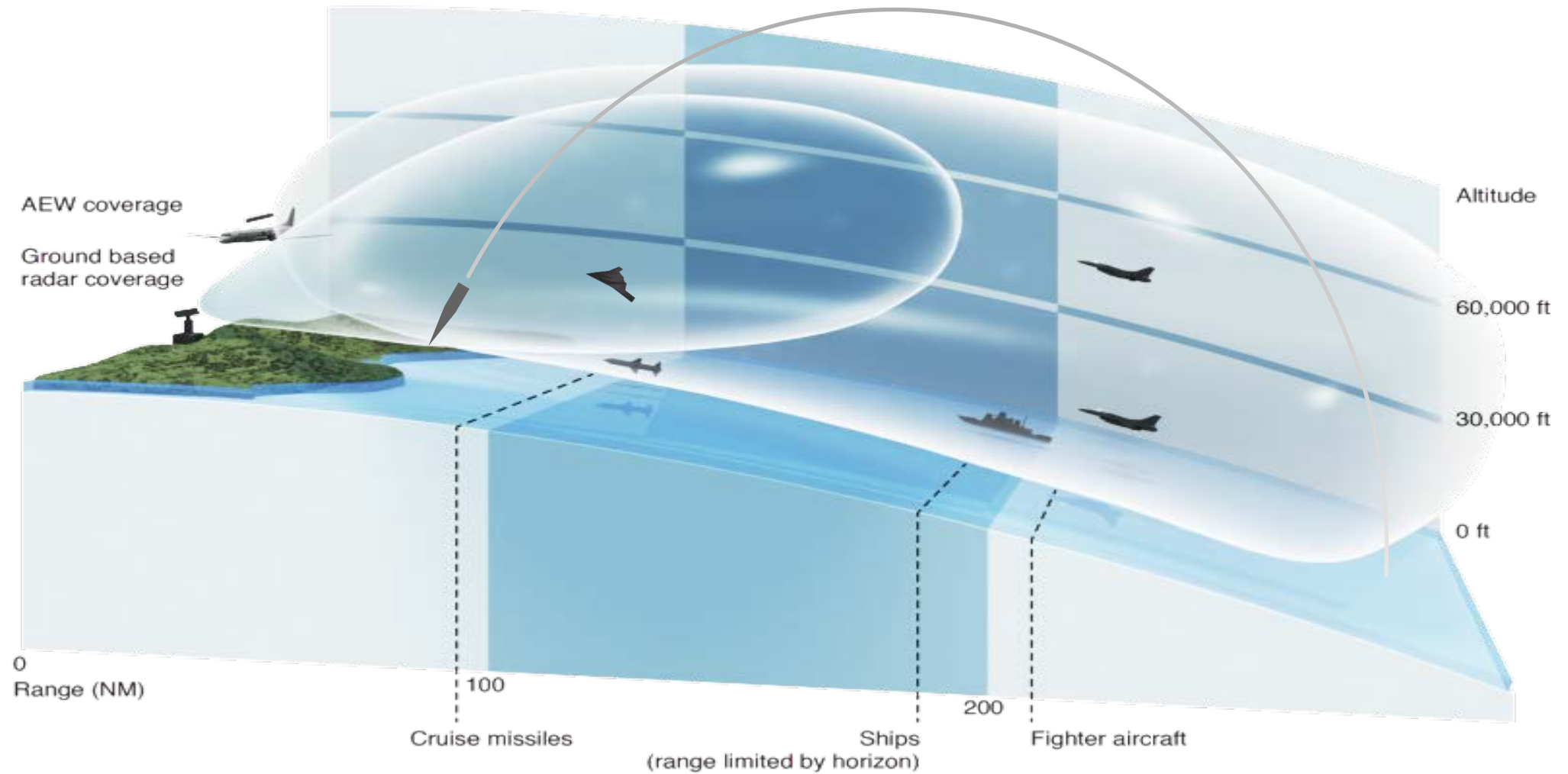


HORIZONTAL SEARCH
NON-ROTATING





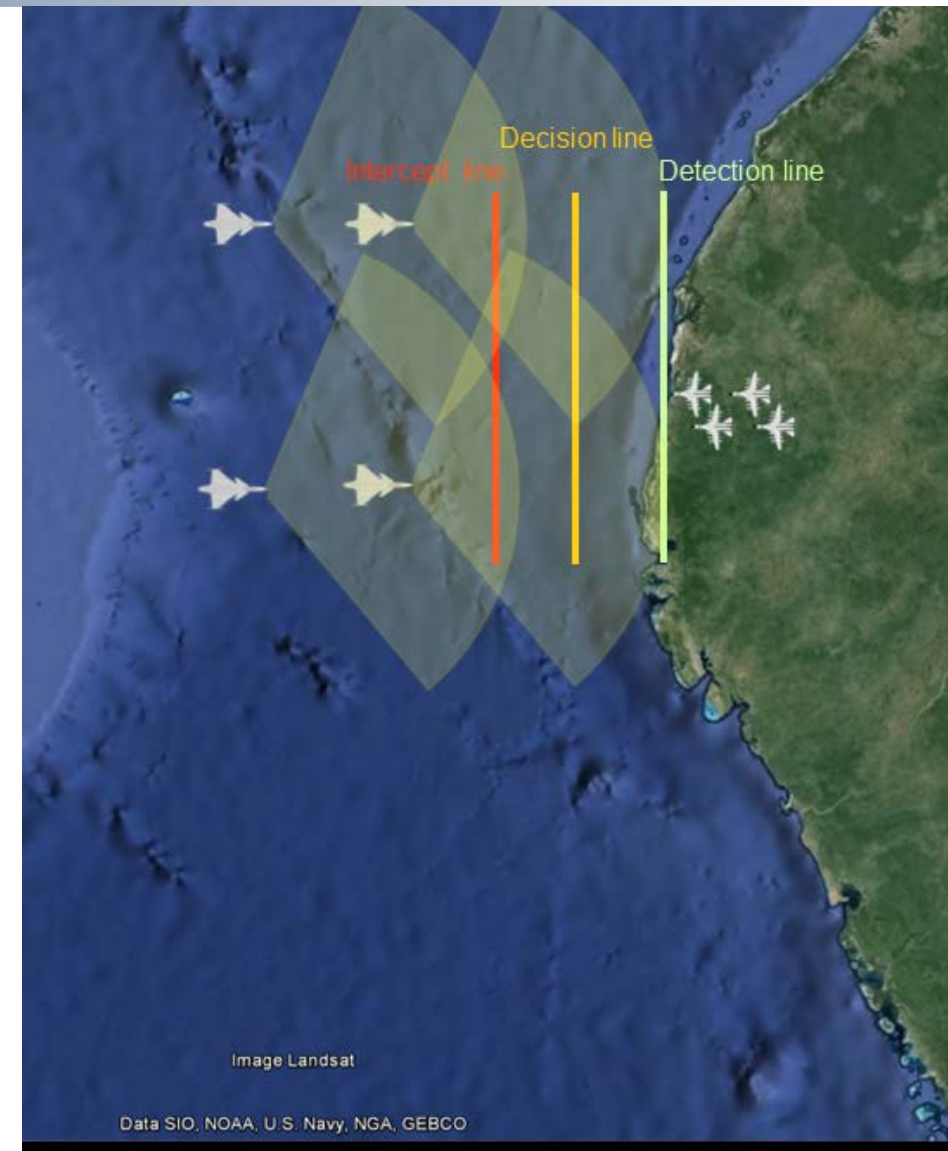
THE CURVATURE AND RADAR DETECTION





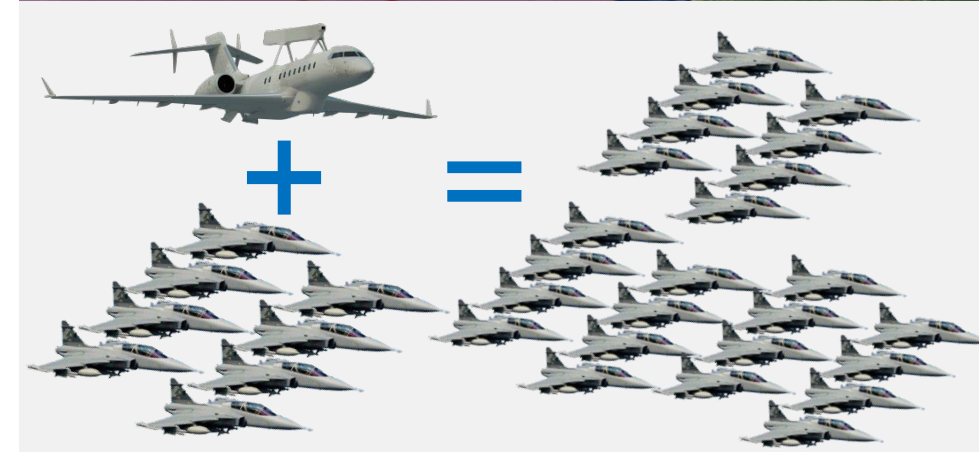
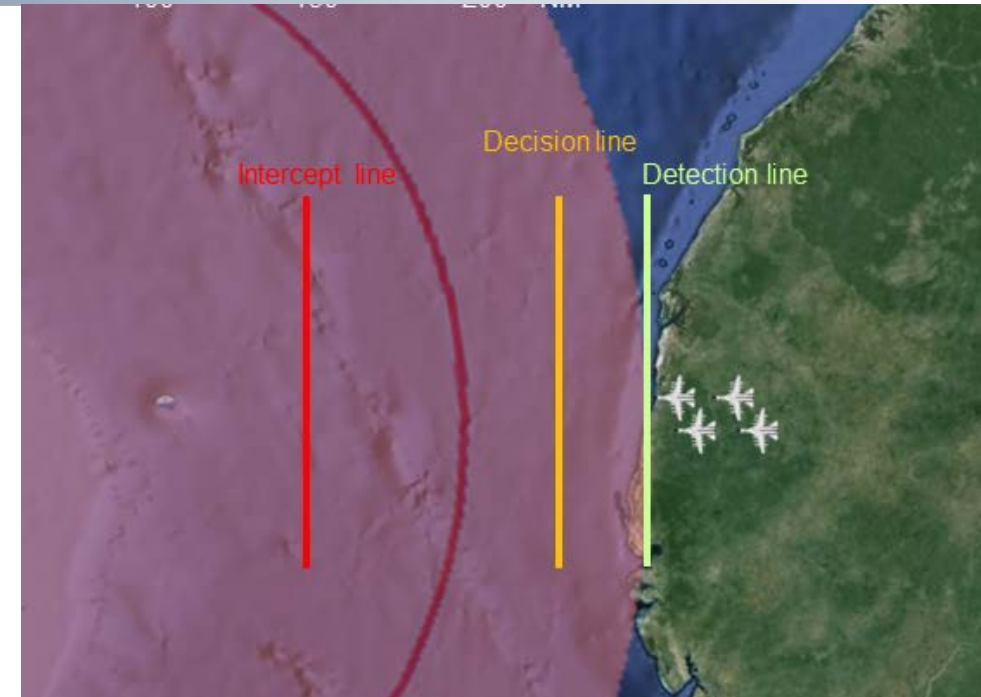
AIRBORNE WIDE AREA SURVEILLANCE

- Fighters on CAP (combat air patrol) - wears down the fleet
 - requires a huge fleet
 - limited surveillance capacity
 - puts high stress on supply chain
 - wears down the combat fleet in a relative short time.



AIRBORNE WIDE AREA SURVEILLANCE

- Fighters on CAP - wears down the fleet
 - requires a huge fleet
 - limited Surveillance capacity
 - puts high stress on supply chain
 - wears down the combat fleet in a few weeks.
- With an AEW&C – fighters are ready when needed
 - 24/7 coverage is achieved with a small fleet
 - provides complete surveillance
 - keeps fighters on base – fully ready.



GLOBAL EYE NEW COMPLETE SOLUTION

- New smart thinking:
Swing-role air, maritime
and land domain
- New radar system:
Erieye ER
- New aircraft:
Bombardier Global 6000



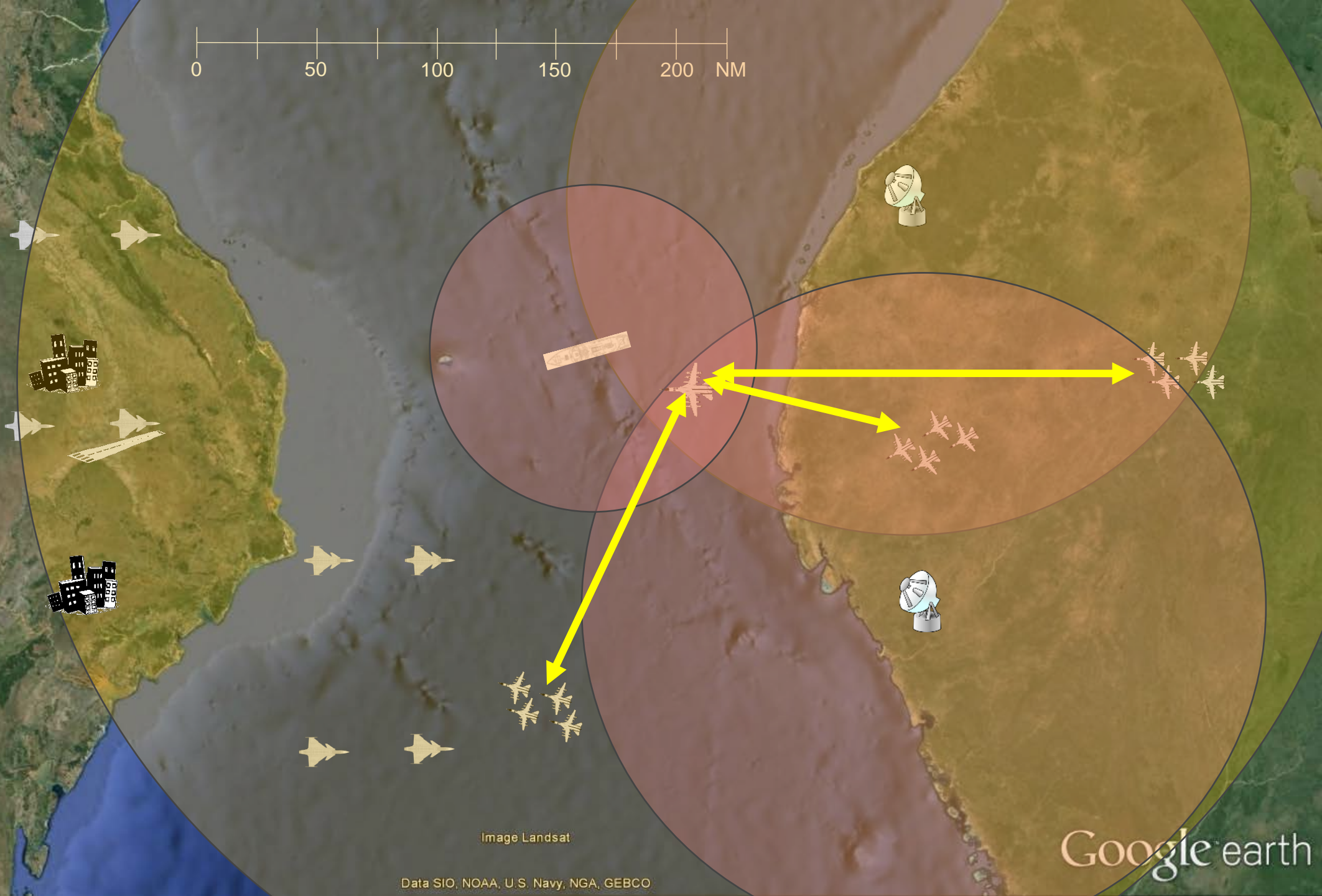


Image Landsat

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth



Image Landsat

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth



Electronic Order of
Battle without EA

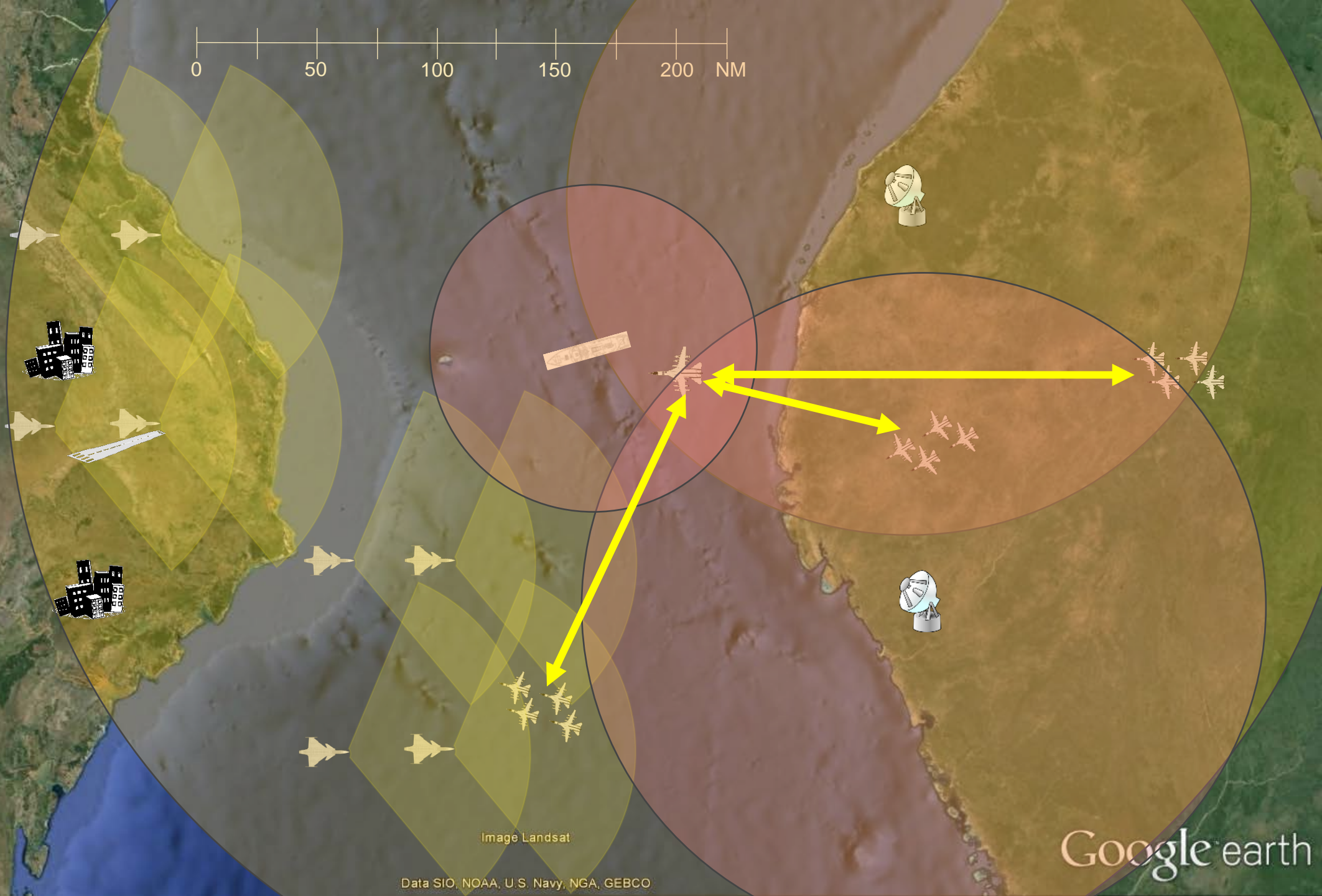


Image Landsat

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth



Electronic Order of Battle with EA

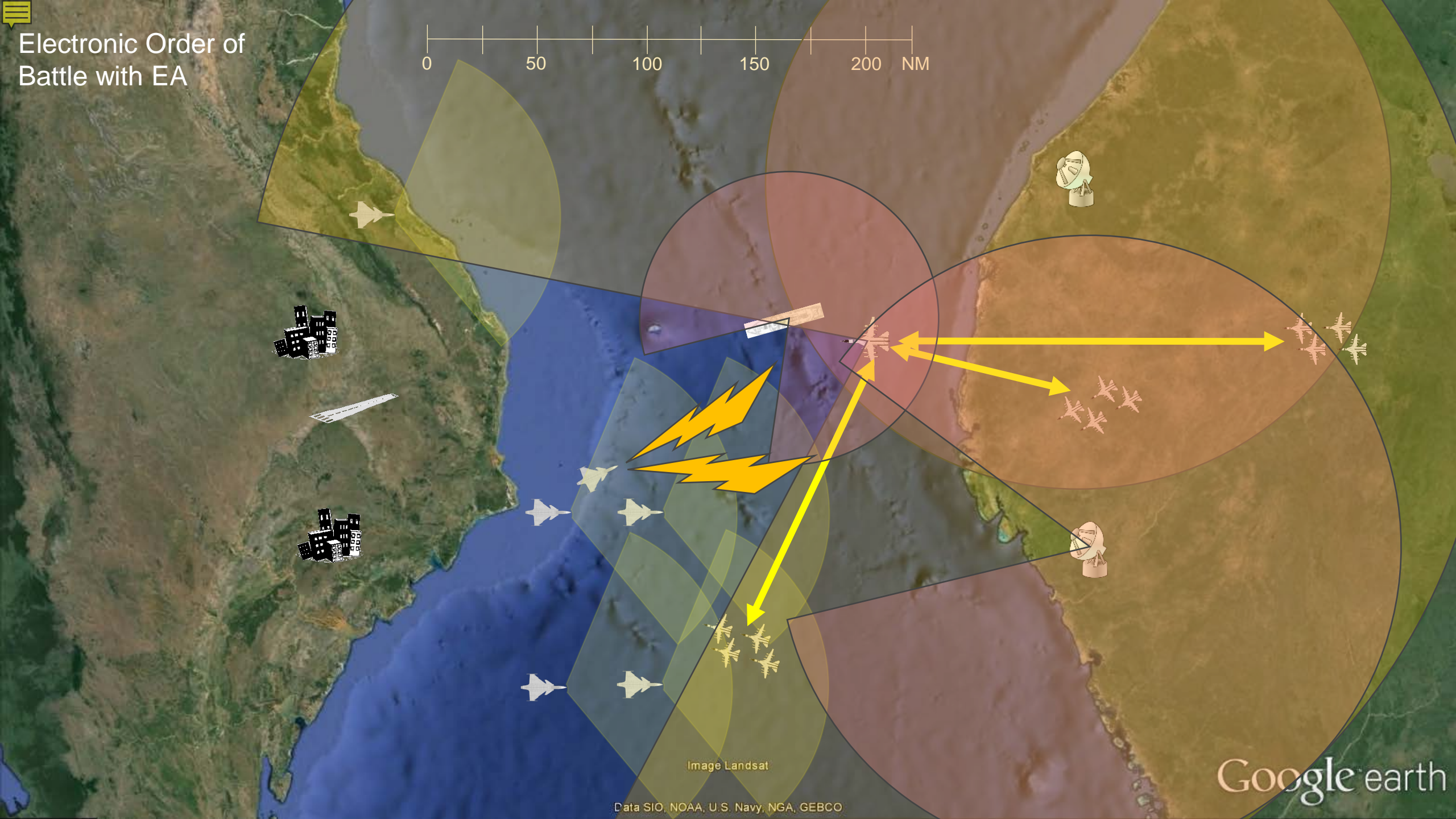


Image Landsat

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Google earth

ELECTRONIC ATTACK JAMMER POD

- Electronic Attack capability supplementary to the onboard EW.
- Wide frequency coverage
 - against airborne as well as ground- or ship based surveillance and acquisition radars.
- Technology re-use from Gripen E development.





SENSOR SYSTEMS AS FORCE MULTIPLIERS

CONCLUSIONS

- Sensor capability through new sensor technologies to cope with stealth, small, fast and slow targets in a jammed environment.
- Multi-function capabilities in all the assets.
- Combined active and passive sensors.
- Surveillance platforms in all domains increase effectiveness of offensive assets.
- Availability of sensor information through common C4I solutions.
- Mobility of sensor systems.





THANK YOU
FOR LISTENING!

