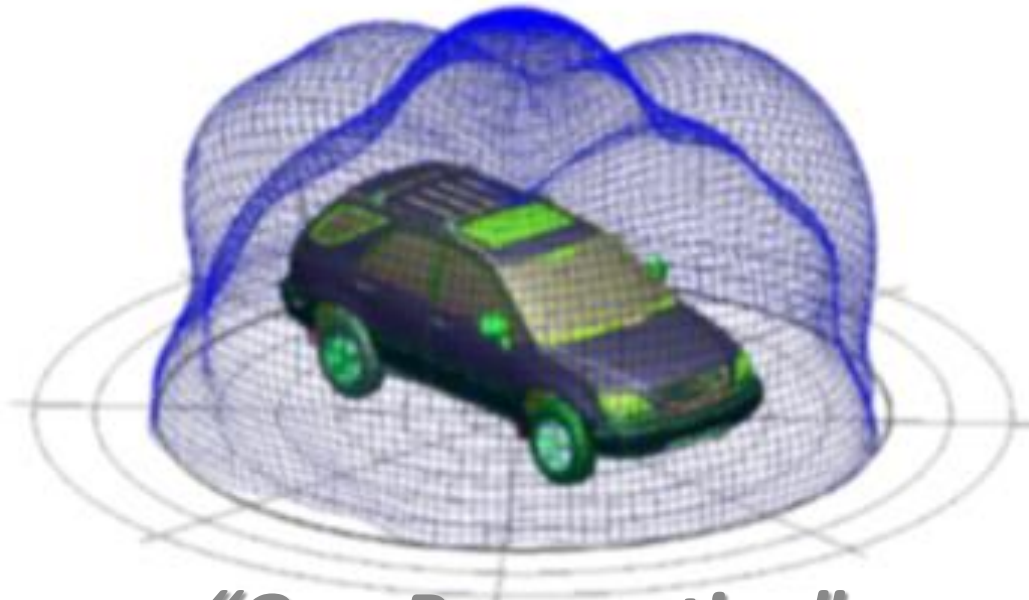


EW protection for all land platforms during contingency operations



“One Perspective”

Erik Bamford

SO EW/RNoAF/NEWC



This presentation is
UNCLASSIFIED



Agenda

- Communication jamming
- Post-9/11 Lessons Learned
- Moving beyond the threat of RCIED's

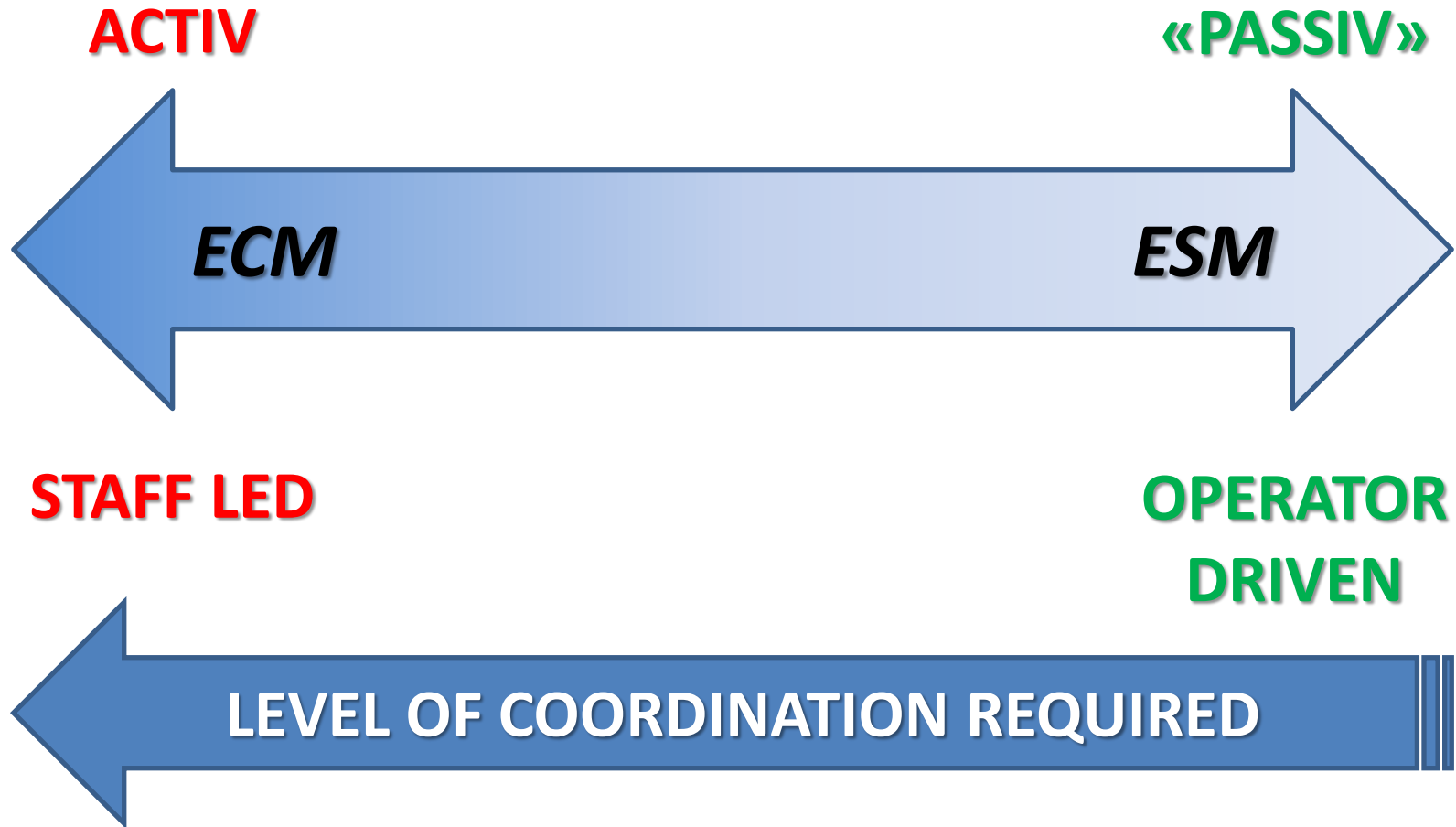


Communication jamming

- Operational truths:
 - Cross domain communications is the core of Joint Ops
 - All emissions present a vulnerability
 - All entities within an operational theatre use the same spectrum
 - Laws of physics apply to all users of the spectrum
- Strategic implications
 - Own command, control and communication (C3)
 - Own Blue-Force-Tracker / Battlespace Management Systems
 - Own sensors
 - Legal requirement related to “distinction”
 - Host Nation ECOM regulation
 - Neutral Communications
 - Commercial Actors
 - HN income from spectrum allocation e.g taxes



Communication jamming

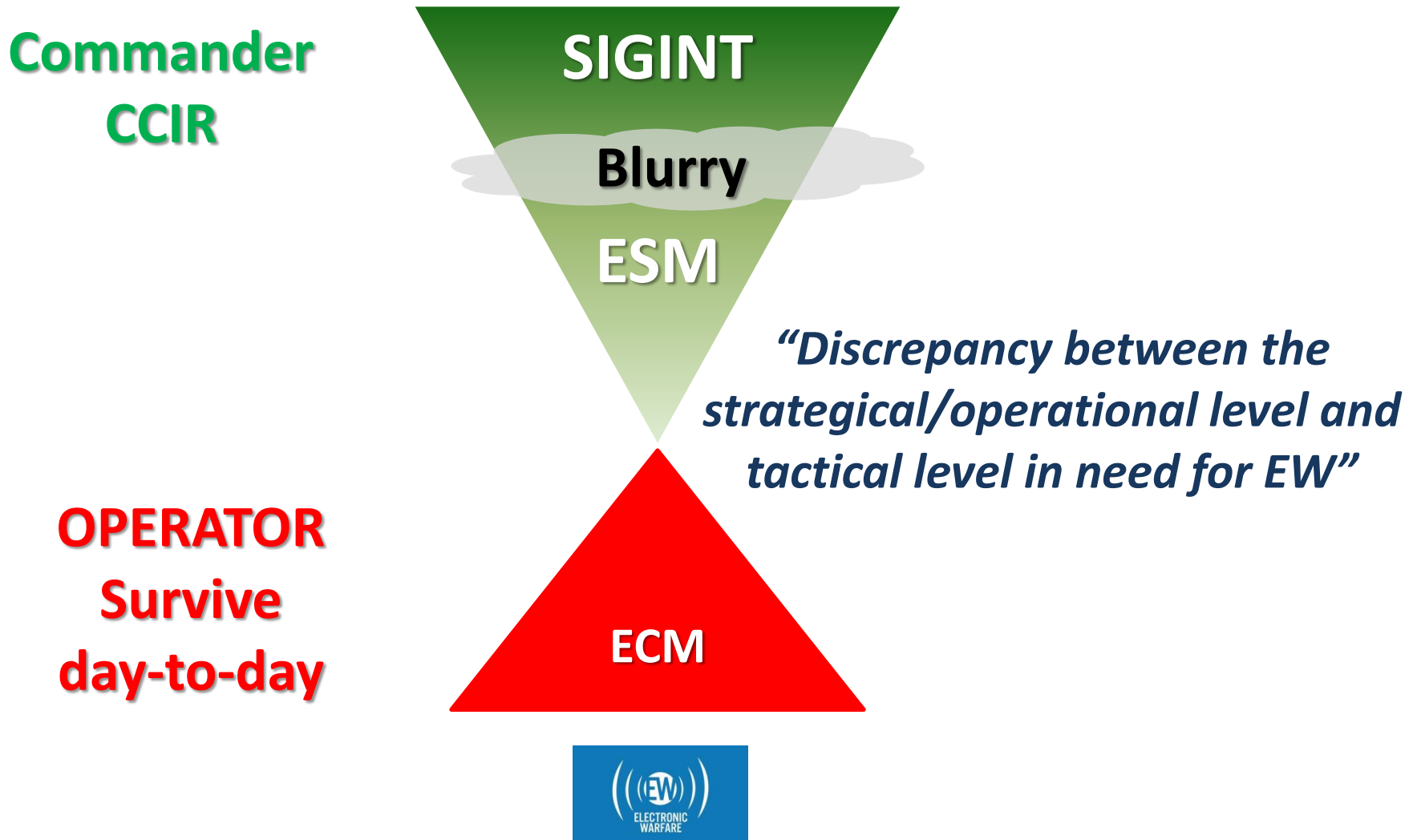


Post-9/11 Lessons Learned

- Classic insurgency theory dictates a hide-hit-run-hide approach until insurgent force has grown sufficiently to meet the conventional force/suppressor in open battle
- Exploiting the EMS and commercial RF-devices has allowed insurgents effective C2, ISR and weapon initiation/guiding
- Land EW has been too quick in redeploying tactical ECM capabilities from theatre
- Pendulum has swung in favor of ESM



Post-9/11 Lessons Learned



Moving beyond the threat of RCEID's

- Force Protection – a national responsibility
- ...but also a Joint Force challenge
 - Uncoordinated use of ECM / RC-IED jammers had a **strategic negative impact** on friendly C3 in AFG
 - ...and we are not alone in identifying this! (*Achilles heel*)



Current ED for Land Warfare

TACTICS

One of several
threats

Coverage
EMC
RADHAZ
COMMS
SENSORS

INTEGRATION



PROGRAMMING

FORENSICS
INTEL
RESEARCH

EW DB

ACTIVE -----> REACTIVE / RESPONSIVE



Current ED for Land Warfare



Current ED for Land Warfare

Compatibility / Interoperability

EMC
RADHAZ



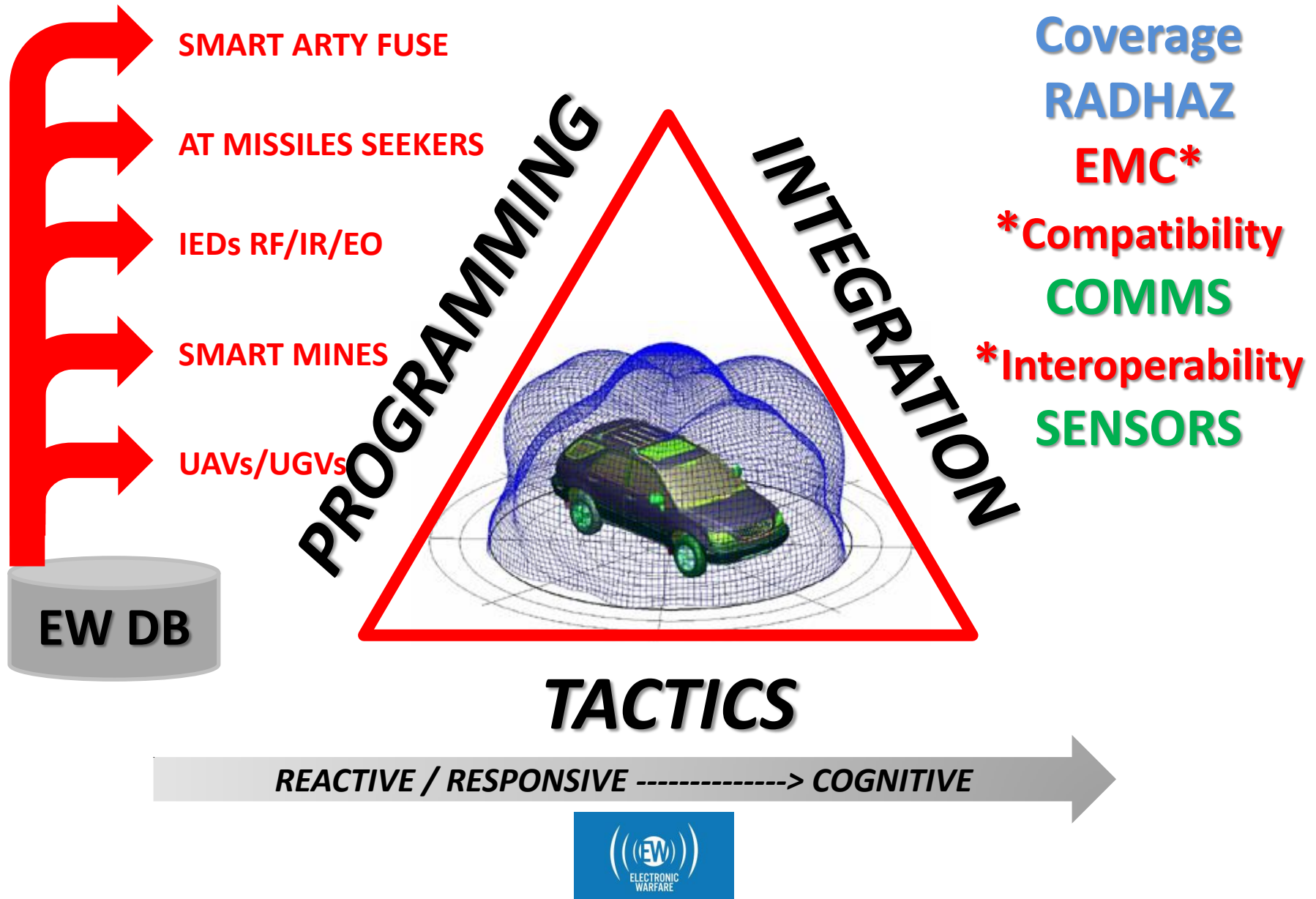
*QUALIFIED
SOLUTION!*



Coverage



Future ED for Land Warfare





***EW FOR
FUTURE
OPERATIONS!***

Thank you for your attention!

