

Italian Defense General Staff C4I Systems and Transformation Division



***SOFTWARE DEFINED RADIO
PROGRAMME DIVISION***

International Tactical Radio Workshop

The ITALIAN SDR Project

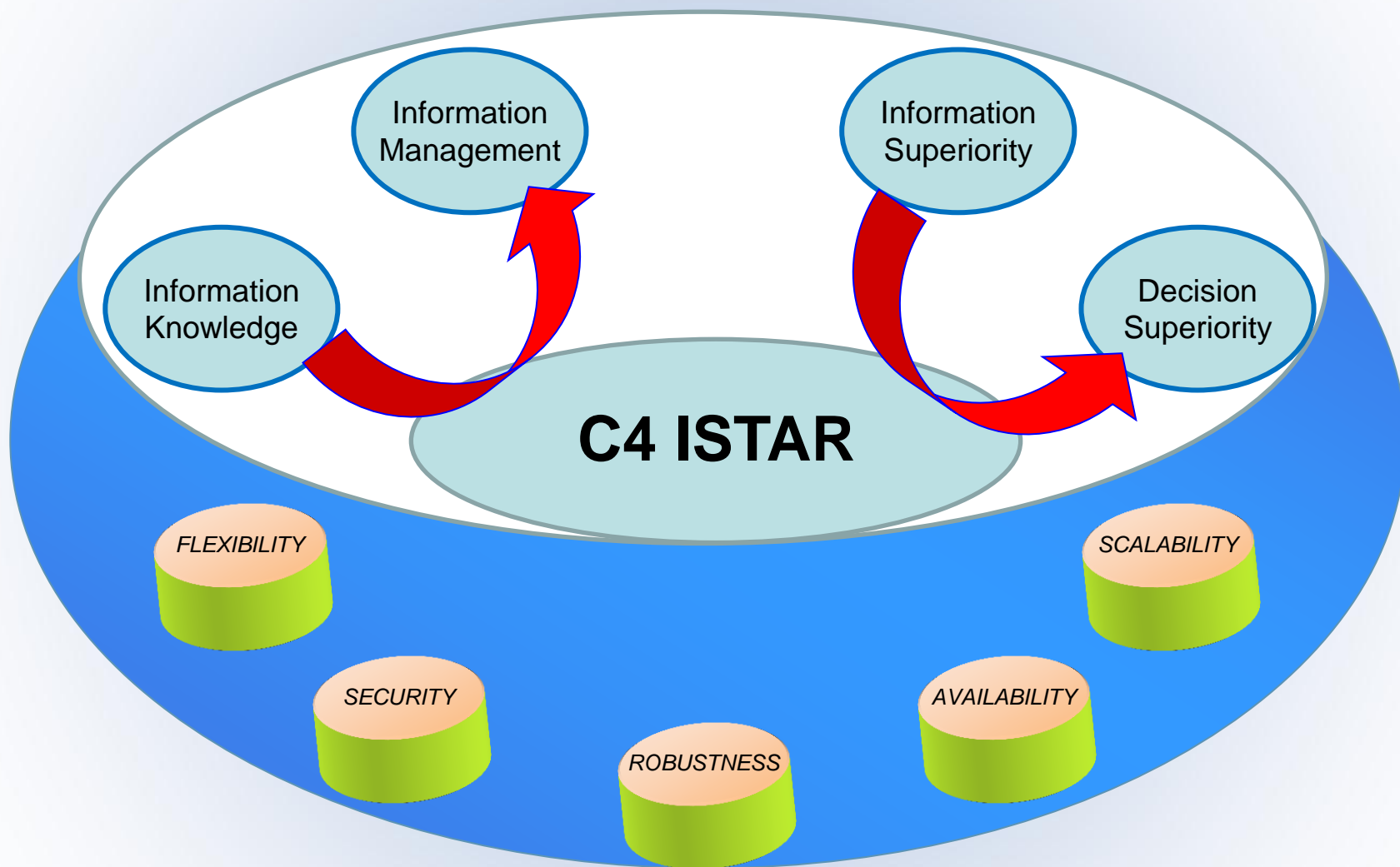


National vision on future
Land & Maritime
Operational Scenarios

- ❖ **Introduction**
- ❖ **National Operational Requirement**
- ❖ **Procurement Scenario**
- ❖ **National SDR Programs**
- ❖ **International SDR Cooperation**

- ❖ **Introduction**
- ❖ **National Operational Requirement**
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INTRODUCTION





DII

**DEFENCE INFORMATION
INFRASTRUCTURE**

INFRASTRUCTURE

SECURITY

**APPLICATION
SERVICES**

C2

Flexibility

Protection of Communication

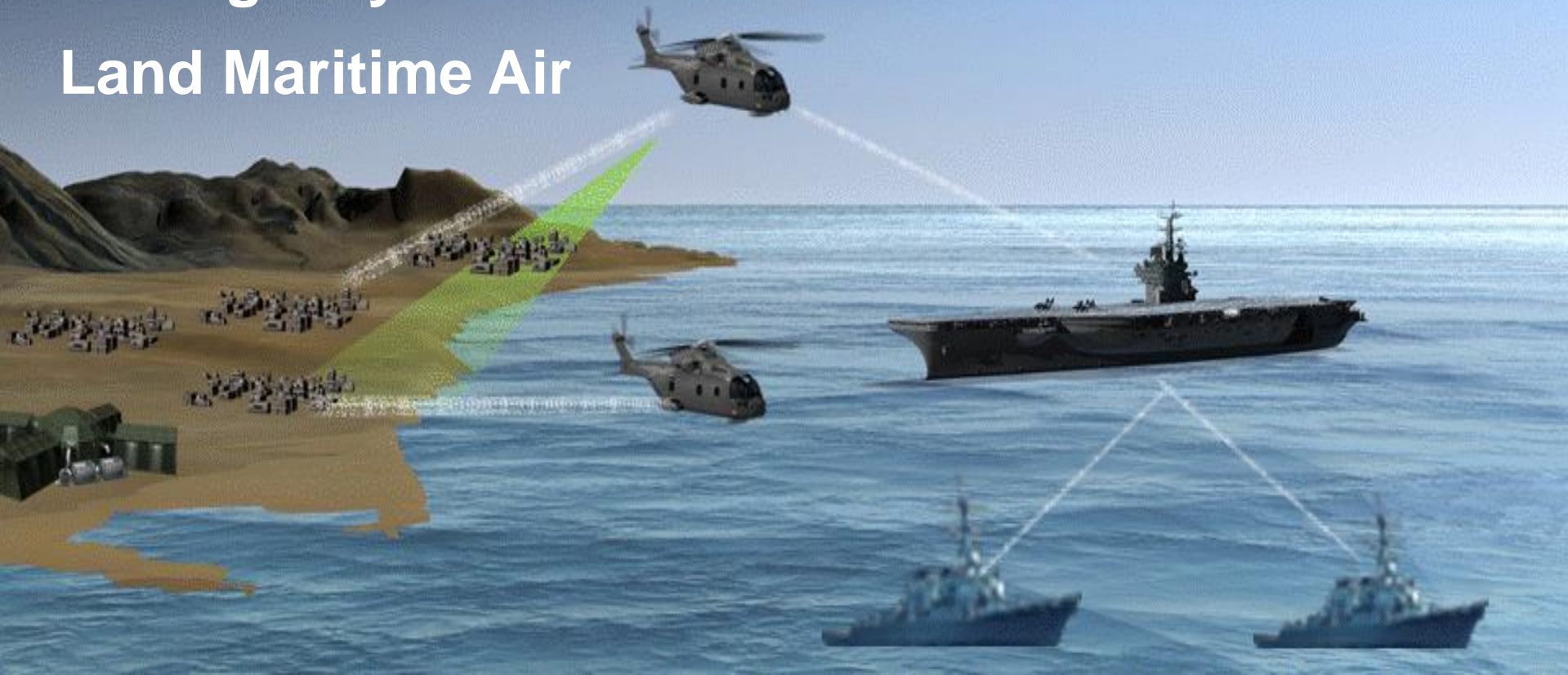
Interoperability

Integration

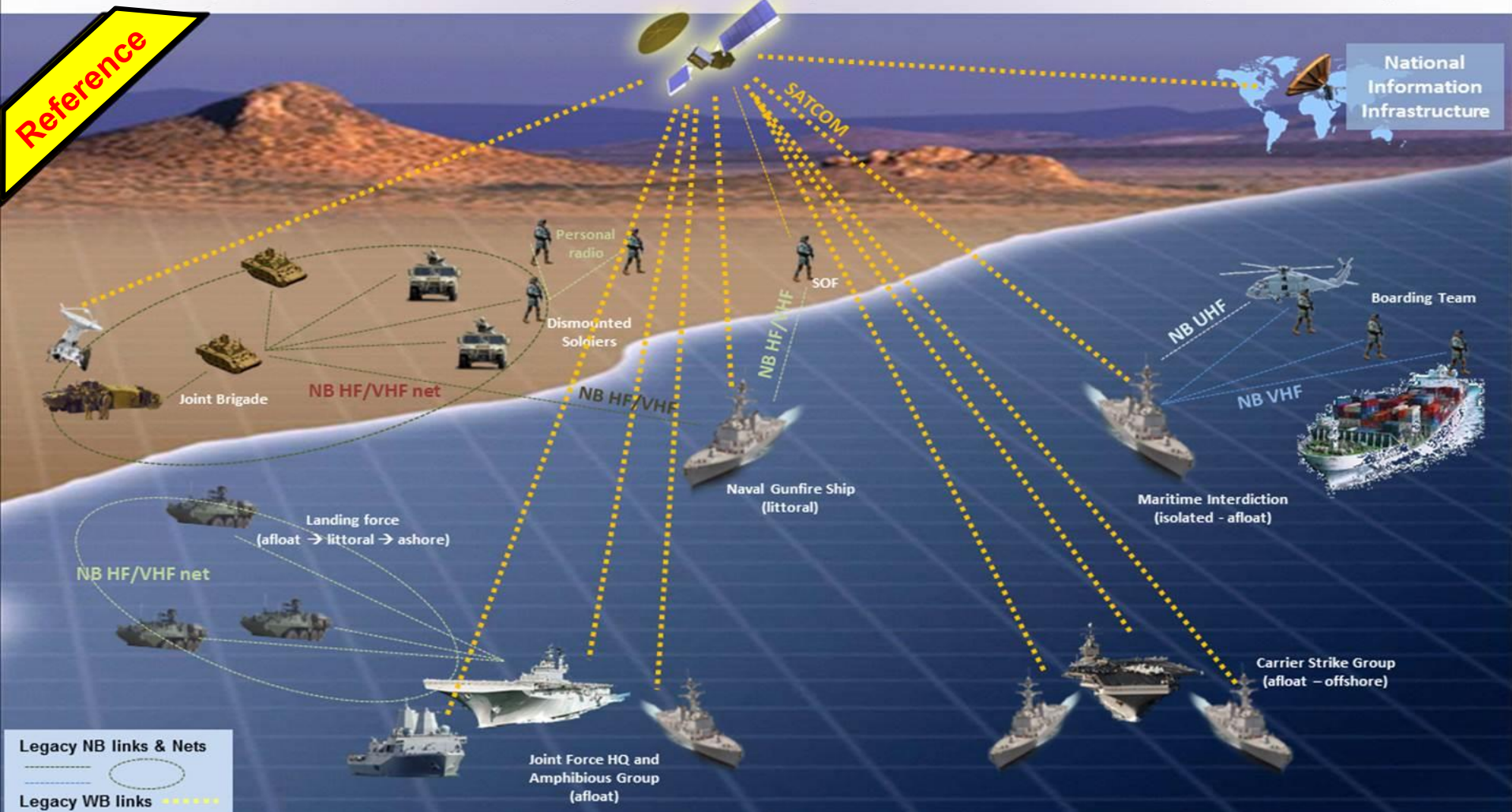
CIS Services

- ❖ Introduction
- ❖ **National Operational Requirement**
- ❖ Procurement Scenario
- ❖ National SDR Programs
- ❖ International SDR Cooperation

Joint & Multinational
Projection of the assets
Interagency
Land Maritime Air



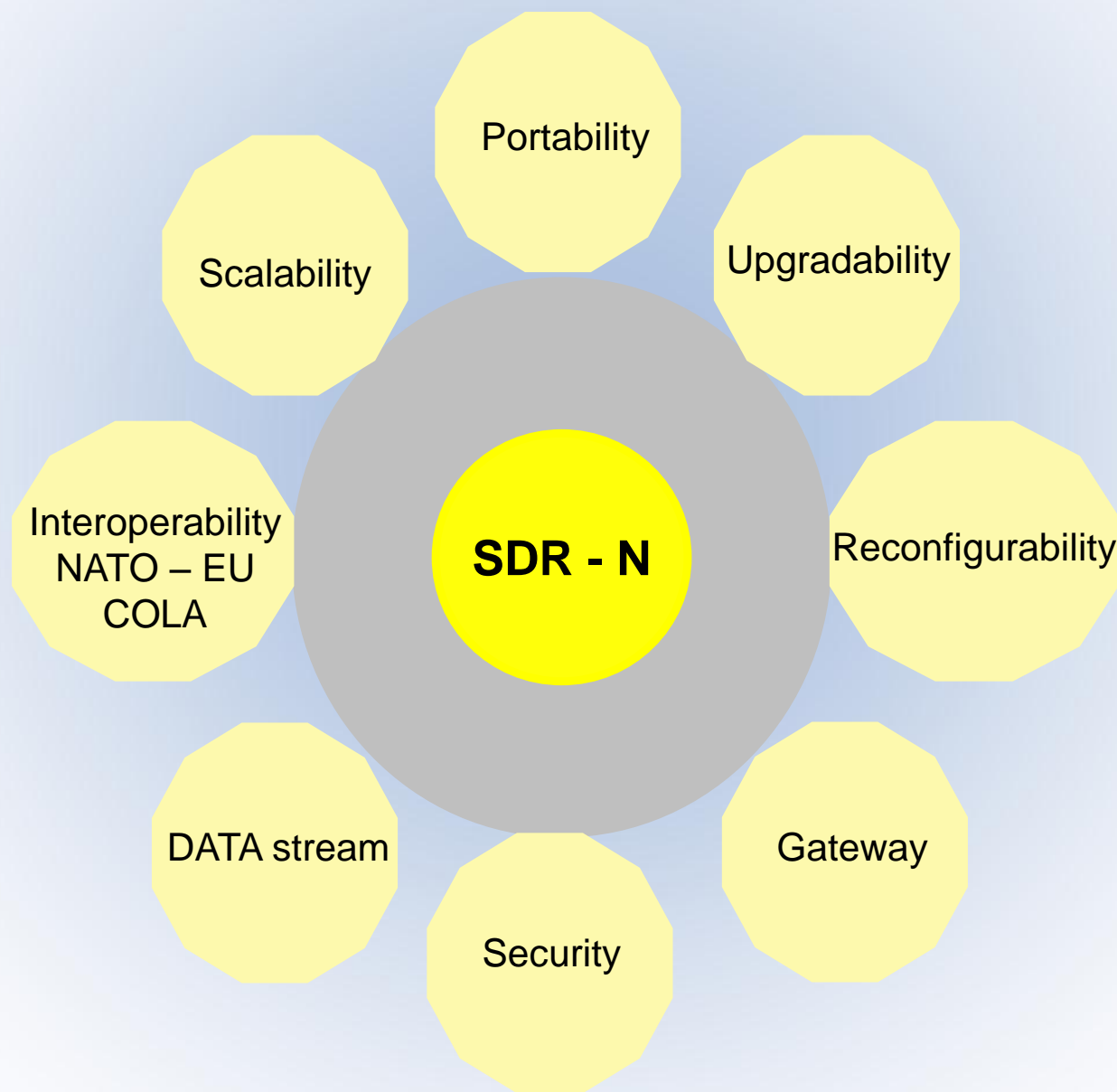
Littoral Environment



OPERATIONAL REQUIREMENT

10

26



- ❖ Introduction
- ❖ National Operational Requirement
- ❖ **Procurement Scenario**
- ❖ National SDR Programs
- ❖ International SDR Cooperation

PROCUREMENT SCENARIO

12

26



- ❖ Introduction
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- ❖ Procurement Scenario
- ❖ **National SDR Programs**
- ❖ International SDR Cooperation

National SDR Programs

14

26



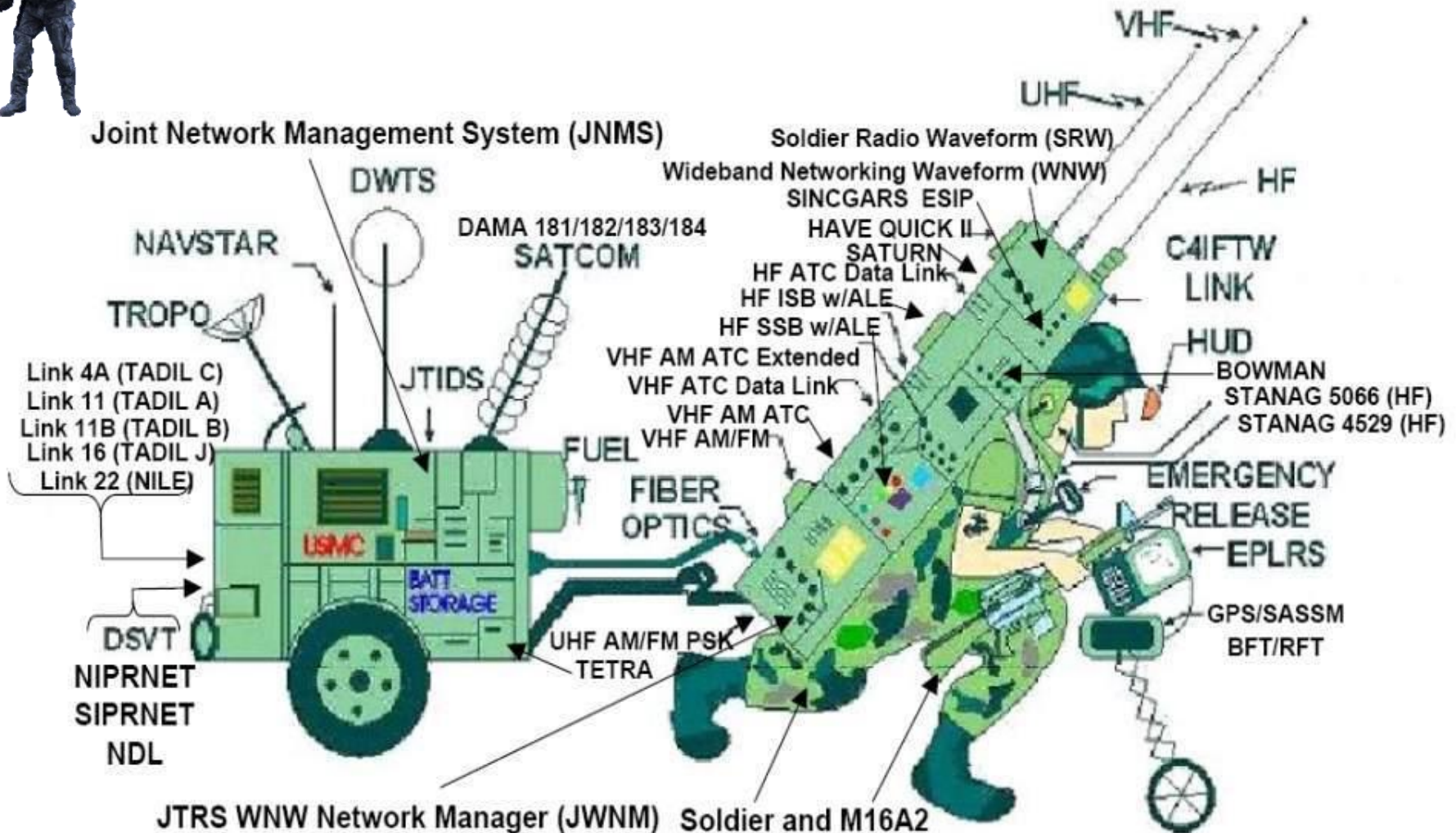
Future Soldier

Land Program F NEC



Naval Program

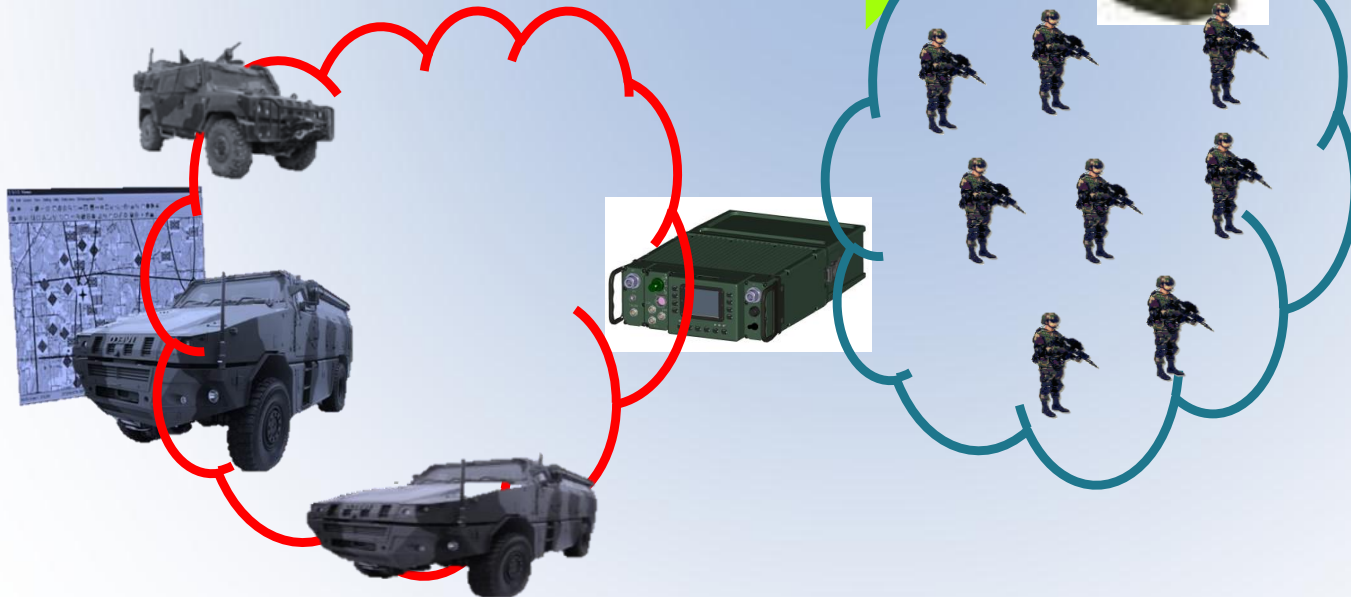
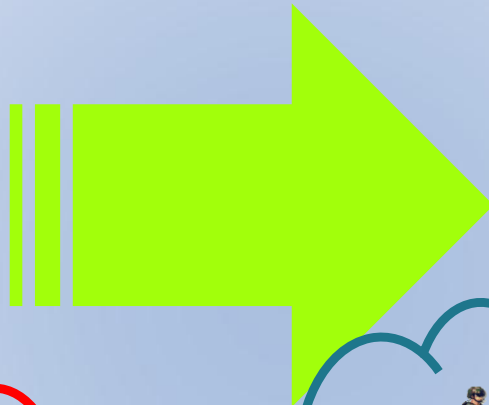
Future Soldier



Future Soldier



















UHF
VHF



F NEC






Today

			 SINCGARS 635/V	 HCDR	 CNR 2000	 SRT-651	AN/PRC -148 AN/PRC-152	 TSM 305				
												
												
												
												
	 PRR	 IPR	 SINCGARS 633/P	 SINCGARS 634/V				 TST- 211B				
Tipo		Dismounted		Vehicular					G-A-G	SATCOM		
Band	UHF	VHF	VHF	UHF					HF	UHF	UHF	X - Ku



F NEC

End State

<div>X</div> <div></div> <div>II / III</div> <div></div> <div>I</div> <div></div> <div></div> <div></div>	<div></div> <div><div><div>MANPACK 2 CH</div></div></div> <div><div><div>DISMOUNTED SOLDIER</div></div></div>	<div><div>VEHICULAR 4 CH</div></div>	<div></div> <div></div> <div></div>					
Tipo	Dismounted		Vehicular			G-A-G	SATCOM	
Band	UHF	VHF	VHF	UHF	HF	UHF	UHF	X - Ku

Naval Program

OSV



LSS



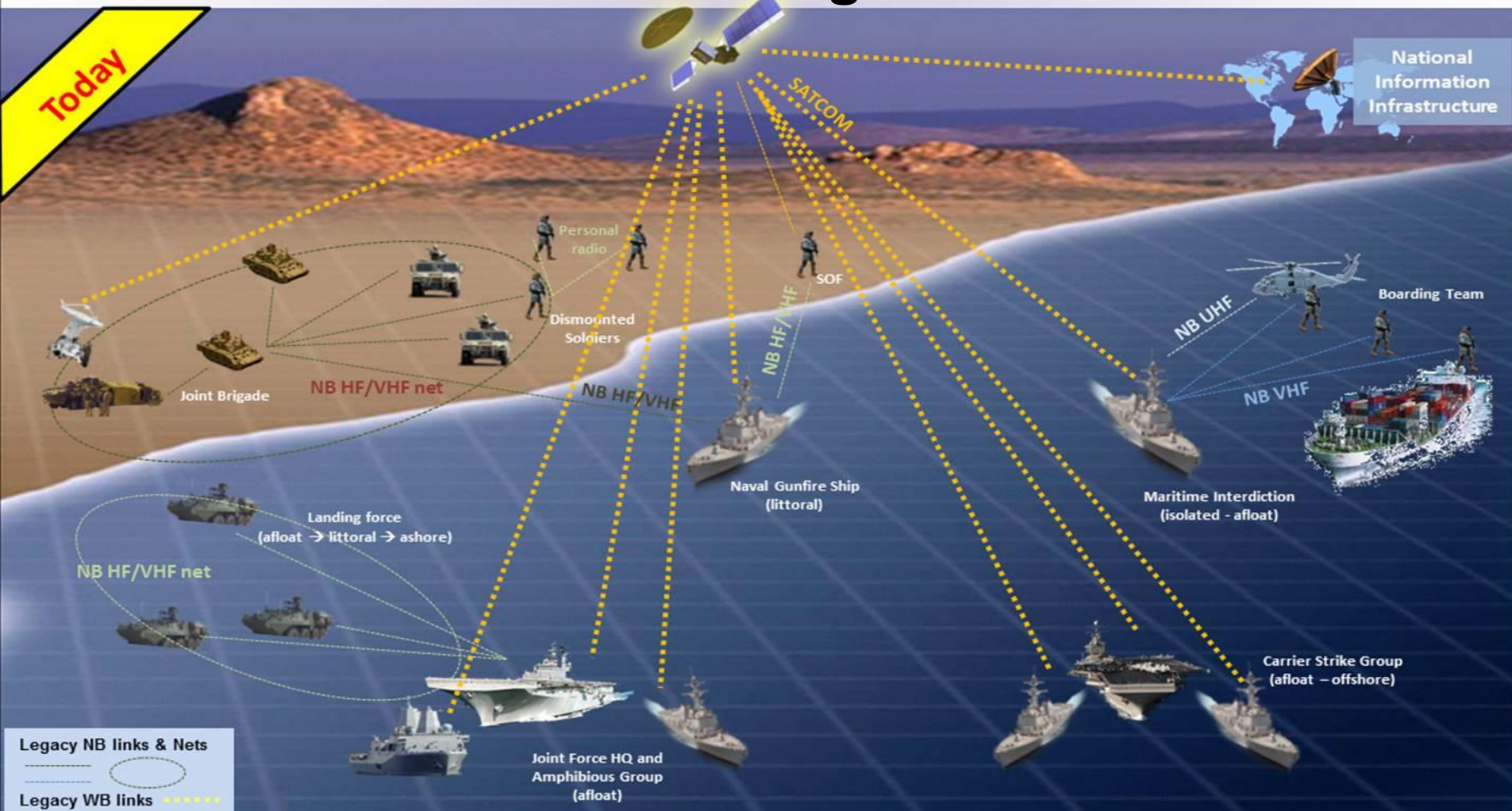
LHD



Navy **new naval programs** foresee full deployment of SDR technology:

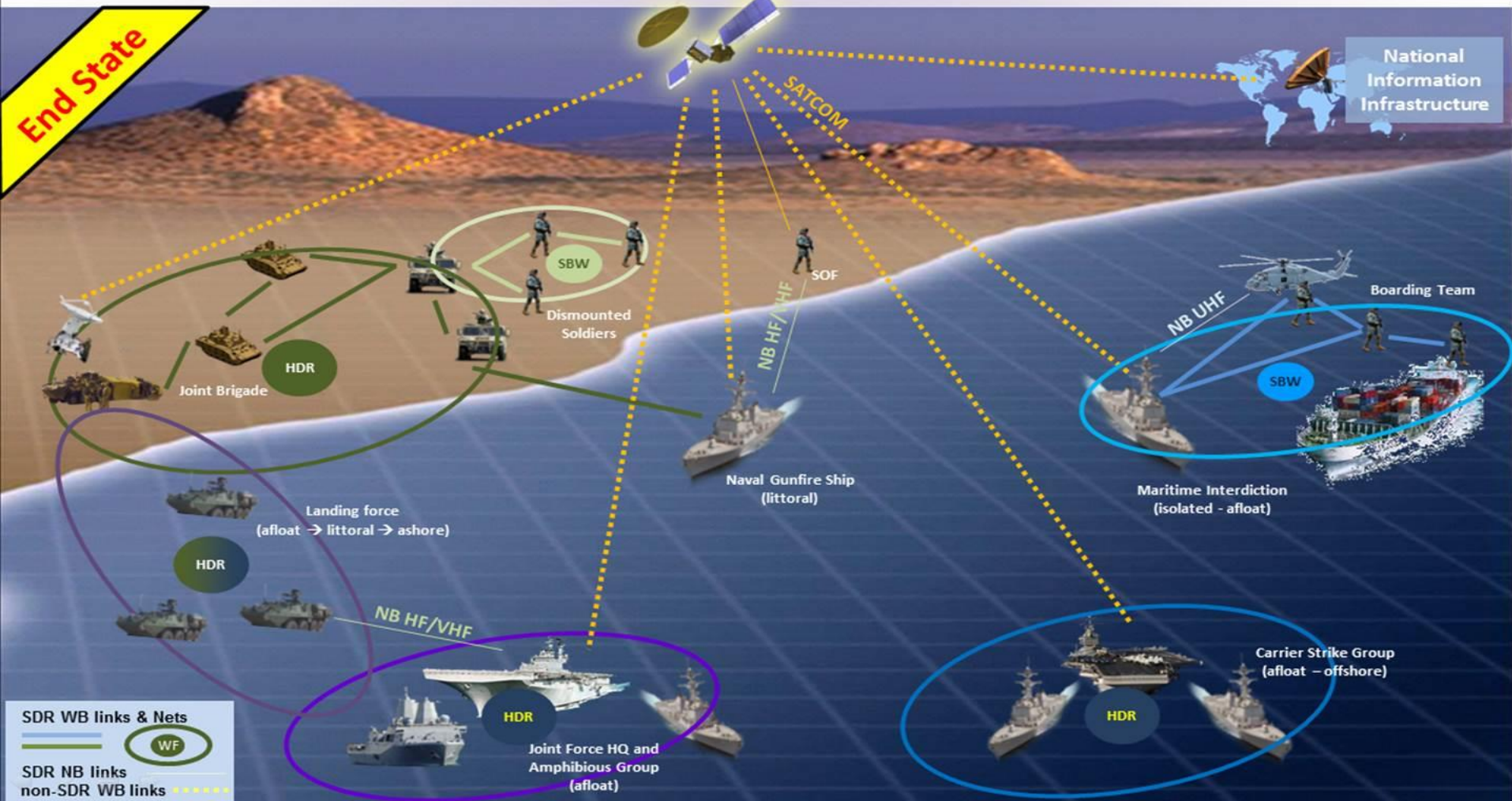
- Unique Naval SDR HW platform (*external COMSEC*) for:
 - “HF house” (voice/data with 2G & 3G ALE)
 - VHF: fixed frequency voice / data
 - UHF: LOS fixed freq., EPM (Have Quick / Saturn), **Wideband** (SBW, future HDR)
- Land SDR HW platform (*Type 1 COMSEC*) for EPM VHF & SATCOM UHF.

Naval Program



Legacy **Wideband** → strictly SATCOM dependent, available at high tiers only

Naval Program



new **Wideband WFs on SDR** → enhanced TLC capability, less SATCOM dependent

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ESSOR

2008 6 Nations

FIN FRA ITA POL SPA SWE

OE (SCA)

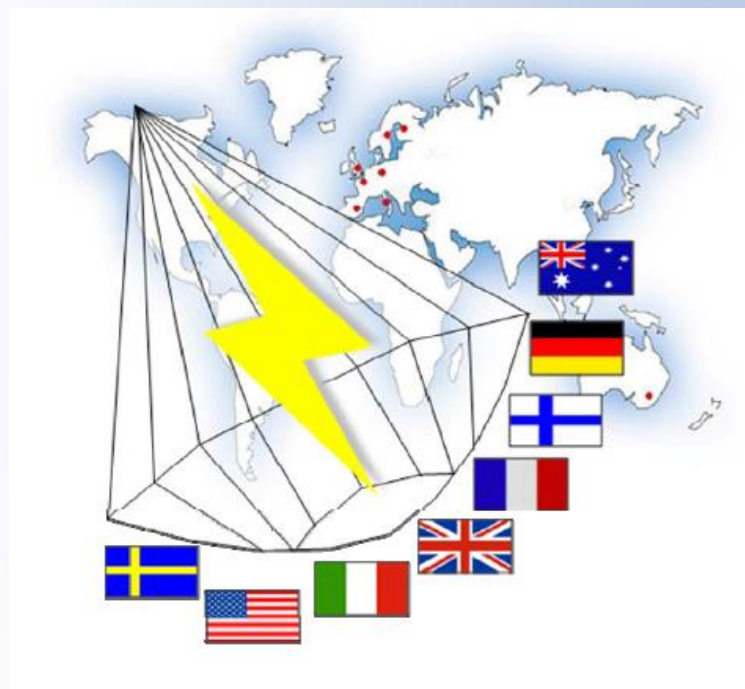
HDR WF (Ph 1) R & D

2015

HDR WF (Ph 2) OC



COALWNW



2009 MoU by 9 Nations

2011 ACSD PA

**2014 Review of ORD
(Tentative)**

2016 Contract Awards

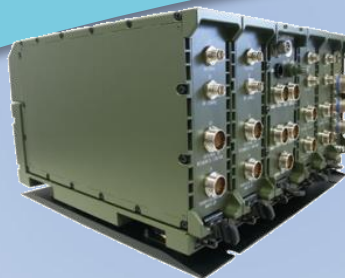
Italian National Vision



ORD
2008



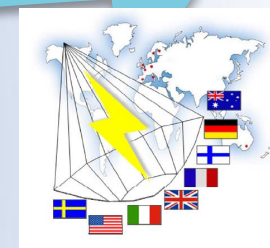
Contract
2011



HW & WF
2014



ESSOR
HDR 2014



COALWNW
2016 on

Thanks for
your attention

Italian Defense General Staff C4I Systems and Transformation Division



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