

# TEAM YELLOW 2

# 55

ALWAYS ON synthetic environment accessible and able to use for training outside of CTC or Exercise

## 0-2 YEARS

- access points in team rooms
- set the framework (drawing data, writing exercises)

## 2-5 YEARS

- GRP level program manager cell
- End-user testing and implementation

## 5-10 YEARS

- incorporate training and familiarization into IRC (information related capabilities) training pipelines
- Fully integrated into all CTC and JCS Exercises

# TEAM PURPLE 2

# 49

## Primary Concern: No program of Record

There is not a P2 Funded program of record for Information Advantage

### 0-2 YEARS Plan

- 1) Inject Const estimate into 25-29 POM planning task
- 2) incorporate Synthetic Internet into IA EXORD
- 3) initiate process Joint Integration Development System(JCIDS)

### 2-5 YEARS Plan

- 1) RDT&E w/ All Army requirements
- 2) Acquisition
- 3) Funding

### 5-10 YEARS Plan

- 1) Agility
- 2) Refinement
- 3) Fully fielded across DOD

# TEAM BLUE 2

## Connecting Physical and Digital World in Training Environments

# 42

### 0-2 YEARS –

- Develop effects menu based on actions in the synthetic digital environment at CTCs and other training environments and joint/multinational training exercises.
- Implement information environment objectives into training objectives.
- Increase cooperation with other IRCs and JIIM partners

### 2-5 YEARS

- Further emphasis of IE objectives in training objectives across DoD
- Procurement of standardized solution for synthetic internet
- Continual modernization, update systems, incorporate adaptability within the system

### 5-10 YEARS

- Synthetic adjudication incorporated within the digital environment and communicates directly into OC/T adjudication in the physical training environment
- Revamping infrastructure at CTCs and other training locations to connect the digital and physical world

# TEAM SPARKLE 1

# 34

**272 Need more focus in the MOS- it is too generalized for SM to specialize in niche skill sets.**

## **0-2 YEARS:**

- grow the force/maintain the force
- create broader special skill development map
- identify SMEs to create training and doctrine

## **2-5 YEARS:**

- increase funding
- grow the force/maintain the force
- utilize skill development map for those already in the force
- career advancement HRC (technical vs leadership)
- introduce implementation of new specialized skill identifiers (educate)

## **5-10 YEARS:**

- grow the force/maintain the force
- assignment of specialized MOS
- sustainment (incentive or special duty pay)

# TEAM PURPLE 1

## Priority 1 Concern: Standardization

# 28

**Lack of demand signal for prioritized resources management relevant to information environment.**

0-2 YEARS Identify proponent for IA / IW Center of Excellence (CoE)

2-5 YEARS Define MTOE and establish SOPs for IA / IW CoE

5-10 YEARS Maintain a cohesive environment conducive to data sharing with partners. Maintain SITE for units of actions and build scenarios to meet the IA objectives

# TEAM SPARKLE 2

# 27

## ISSUE 1: DEFINE REQUIREMENTS FOR SIT ENVIRONMENT

### 0-2 YEARS

- Iterations of SITs
- Solicit feedback from stakeholders
- Submit to wider communities of interest

### 2-5 YEARS

- Periodic review for continuity and sustainable practices
- Establish scalability
- Identify tools and knowledge required [on the backend]

### 5+ YEARS

- Continued maintenance and growth

# TEAM BLACK 2

# 24

2) Lack of realism/impact from OPFOR in training manpower cost of red team

Solution- automated red force built off advanced AI/ML

0-2 YEARS-

- Understand threat
- Systematic data collection to develop AI algorithms

2-5 YEARS-

- Automation for realistic challenges in collective training exercises development and validate of AI and integration into collective training

5-10 YEARS-

- Augmented reality real-time visualization of OPFOR and BLUEFORCE effects in IO, Cyber, domains training direct impact on mission (for CMD/staff)

# TEAM YELLOW 1: develop system interoperability

# 22

0-2 YEARS: Determine requirements and what has already been developed. What tools does everyone need / want? Potential technical scouting for additional options.

2-5 YEARS: socialization / approval with end users at all echelons; technical buildout and testing of system.

5-10 YEARS: build system interoperability / common language / translator between as many different platforms as possible (ION, SITE, etc.) Select singular platform and ensure all tools work on desired system. Continue to scout for additional tools and platforms to bring into system.



# TEAM WHITE 2

# 22

0-2 YEARS: Generating the ISICD (requirements document). Deputy principal advisor USDP for information operations needs to develop policy directives OIE (IE).

2-5 YEARS: Program of record is issued and directed for integration into CTC/warfighter exercise.

5-10 YEARS: Policy decisions are implemented for force design and future solutions

**Lack of clear and concise guidance from Army and Joint for what to develop. Additionally, each DoD component is developing their own thing.**

# TEAM RED 1

# 19

0-2 YEARS: Requirements for environment defined to include training all different IRCS, branches, services, agencies, and organizations (JIIIM-level defined requirements). Begin Onboarding of different stakeholders, and initial map of an always active cloud service environment to be modular, interoperable, standardized, and dynamic.

2-5 YEARS: Continue onboarding stakeholders from the entire JIIIM community. Give common interface requirements to vendors, identify and collect hardware and software for environment. Develop master control module and administration organization. Begin adding all different required modules to base tech. Complete initial prototype on environment.

5-10 YEARS: Continue onboarding and deconfliction of stakeholders. Finalize overall environment. Continue to test and refine, identify new requirements of gaps for updates/upgrades. Develop methods to incorporate partner nation technology/apps.

# TEAM BLACK 2

# 16

3) Limited longitudinal training opportunity with persistent scenario execution

Solution- Training to campaign with ability to maintain persistent presence on SITS environment

0-2 YEARS-

- Designate pilot units (6 month cycles) collective training
- Build out sufficient ranges and servers
- Identify scenarios to affect actual operations

2-5 YEARS-

- Large scale implementation across units/ POR
- Incorporate additional threat areas

5-10 YEARS-

- Impact to training management and execution (campaign)

# TEAM BLUE 2

# 15

**Creating a standardized synthetic internet environment (the baseline for exercises and training) to be used by all IRCs and with JIIM partners**

## 0-2 YEARS

- Flesh out and prioritize requirements for synthetic internet environment
- Send requirements to industry
- Industry bids on and builds a robust real-world mimicking platform that continually scrapes the internet as a base, upon which specific scenarios can be built

## 2-5 YEARS

- Integration in the training environment (PMT, schoolhouses, CTCs, Joint Exercises)

## 5-10 YEARS

- Include in multinational exercises, incorporate in training with partner forces
- Build robustness and complexity of the system, adapt to changing information environment
- COP for influence operations; scenario-based training application for partner forces

# TEAM GREEN 2

## Topic #196: All IRCs on one range with one Common Operating Picture

### 0-2 YEARS – Infrastructure

- Determine if Joint IO Range meets requirements as a backbone to build capability
- Define ownership of determining requirements (currently at Air Combat Command)
- Define processes and tools to be used and how to submit requirements from stakeholders

Endstate for transition: A working capability (IOC-Initial Operational Capacity) that has funding and meets initial requirements

### 2-5 YEARS – Tool Development

- Able to train in a realistic environment with top 10-20 Army requirements met
- Sprints to meet capability development

### 5-10 YEARS

- IRCs able to integrate in Joint Domain (Army multidomain) in Fully Operational Capacity (FOC)

# 15

# TEAM SPARKLE 1

# 14

**305 Technical Tools being integrated into real world environment.**

## **0-2 YEARS:**

- identify capability gap
- identify tools best for short term VS long term
- develop standard for input output on tech formats

## **2-5 YEARS:**

- increase funding
- create platforms interoperable between different systems
- implement standards & refine input output
- testing and evaluation

## **5-10 YEARS:**

- refine platforms interoperable between different systems
- contracting evaluations and requirement adjustments.

# TEAM RED 2 – Feedback systems

# 13

0-2 YEARS - Whitecard Standards

2-5 YEARS- Integrate automation for whitecarding-½ script and ½ dynamic

Create AI audience

5-10 YEARS- Enhanced AI behaviors with MOE metrics for realistic sentiment and response

# TEAM BLACK 1

# 10

Problem: Do not have solid training objectives (129)

0-2 YEARS: Conduct a thorough **analysis** of existing capabilities and develop clear and specific **training objective** which will drive our requirements. This will include lessons learned to identify gaps in existing solutions or capabilities.

2-5 YEARS: Then identify and submit the requirements for approval and inform policy for future decisions. Continue to assess

5-10 YEARS: Continue to refine and assess and refine, as necessary.



# TEAM WHITE 1

## Lexicon

# 9

0-2 YEARS

PSYOP handbook of industry terms  
Identify DOD proponent

2-5 YEARS

Integration into leadership development and education training

5-10 YEARS

Update

# TEAM BLACK 1

# 9

Problem: Build often and Reuse infrequently (43)

0-2 YEARS: Build common framework of scenarios and library.

2-5 YEARS: Request and accept solutions which are amendable, scalable, maintainable, and reliable.

5-10 YEARS: Operate and maintain the solution which will not be outpaced by technological advances, resulting in existing solutions being shelved and starting the acquisition process from scratch.

# TEAM YELLOW 1: mass database build for scenarios

# 8

0-2 YEARS: research what is available, understand current state, and know what requirements are actually needed. (socialization)

2-5 YEARS: find who can build database, procure money, test operational ability to build database. (potential sources are 3rd party, or indoctrinate into SOF pipelines).

5-10 YEARS: implementation of program and refine as necessary.

# TEAM GREEN 2

## Topic #107/188: Tools are modular & interoperable with each other and in synthetic and operational environments

7

### 0-2 YEARS

- Define which tools and the standard to be used for them

### 2-5 YEARS

- Use standard of simulator backbone to develop tool integration to update legacy tools and establish an accepted standard for incoming tools

### 5-10 YEARS

- Use lessons learned to feed continuous ATO
- Keep reviewing and adapting

# TEAM WHITE 1

## Compatible and interoperable

# 7

### 0-2 YEARS

Long term platform solution established for DOD units

Standardized internet training

### 2-5 YEARS

Multi- organizational exercises executed

Cloud based data available to pull into exercises

### 5-10 YEARS

Multi- national exercises executed

Modernization to cloud system



# TEAM RED 2- Data entry

# 7

0-2 YEARS - Collect and input operational data into training SIM

2-5 YEARS- mirroring portions of internet and white cell injects

5-10 YEARS- AI provides dynamic behavior

# TEAM BLUE 2

# 5

## Holding COCOM and Maneuver CDRs accountable for Effects in the IE

### 0-2 YEARS

- With increased training objectives focused on the IE, make consequences severe for neglecting the IE.

### 2-5 YEARS

- Increase OPFOR in training exercises
- Establish permanent OPFOR team (increase at CTCs and increase rank requirement for OC/Ts)

### 5-10 YEARS

- IE plans incorporated at the beginning of planning, updated, prioritized within CDR LOEs

# TEAM SPARKLE 2

# 5

ISSUE 2: RESIDENT EXERCISE SME TEAM [FOR BACKEND SUPPORT]

0-2 YEARS

- Translate requirements to build out exercise objectives and training
- Identify qualities and qualifications for personnel with aptitude for tech support
- Hire and beta test to evaluate process and system for training
- Launch SME team(s) to support cross-domain, cross-echelon, etc.



# TEAM PURPLE 2

# 5

## Concern: Interoperability

Operate at the enterprise level across systems and with other services and mission partners

### 0-2 YEARS Plan

- 1) Gap Analysis (Army wide)
- 2) Data Call: (tools, existing systems, PN requirement)
- 3) Policy

### 2-5 YEARS Plan

- 1) Experimentation
- 2) Refinement
- 3) Fund

### 5-10 YEARS Plan

- 1) Normalization
- 2) Joint Doctrine

# TEAM SPARKLE 1

# 5

**328 ION takes too long to create sentiment in the IE especially without a robust white cell.**

## **0-2 YEARS:**

- evaluate AI systems
- choose primary platform and expand usage

## **2-5 YEARS:**

- increase funding
- refine capability to create sentiment
- expand usage
- incorporate data analytics
- assess cross usage of various platforms

## **5-10 YEARS:**

- evaluate and refine
- adaptive AI susceptible to influence

# TEAM PURPLE 1

## Priority 3 Concern: Identify Evaluation Model <sup>4</sup>

**Lack of "Robin Sage" style training to enhance digital and physical engagements in real time scenarios producing near real time results**

0-2 YEARS Identify scenario pipeline for development

2-5 YEARS Establish SITE platforms that allow for deliberate digital engagement with synchronized physical engagement with local partners and academia

5-10 YEARS Analyze and assess results from training & evaluations through data driven platforms to direct operational requirements

# TEAM BLUE 1

# 4

**Problem:** Inability to bring together different tools from various vendors into one individual "toy box"

0-2 YEARS: Creating an environment where we have "like-capabilities" creating a better understanding of methodology versus buttonology

2-5 YEARS: The SOCOM enterprise will move beyond vendor tool kits and have a mixture of data scientists, software developer, data engineers, and data analysts developing our own source of tools

5-10 YEARS: bringing together multiple simulators (E.G Apache simulators, Infantry feeds via VR/AR, fires simulators) Into one full environment training MDO

# TEAM SPARKLE 2

# 3

## ISSUE 3: DEEP DIVE ON POLICY REGULATIONS

### 0-2 YEARS

- Explore and establish legal ramifications, limitations, and regulations in creating synthetic environment (e.g., data, PII, ethics)

### 2-5 YEARS

- Streamlining and normalcy in the impact and execution of SIT to real-world implementation

# TEAM BLACK 2

# 3

1) Need to train across services and echelons disparate tools and repositories

Solution federated range for IO training

0-2 YEARS-

- Identify responsible manager
- Discover learning/ inventory
- Identify leverage points/common requirements and gaps

2-5 YEARS-

- Foundational platform development
- Stand up Joint multi echelon
- LVC training environment (pay to play)

5-10 YEARS-

- Sustainment/ improvements
- Joint coalition interagency multinational
- Emerging capabilities

# TEAM YELLOW 2

# 3

Data input for current synthetic internet systems is too front side demanding on end user

## 0-2 YEARS

- Mirrored internet training system (ALWAYS ON)
- Accessible in team room environment
- Capable of COCOM deep-dive
- Ability to inject narratives for simulated testing

## 2-5 YEARS

- Self-aware AI that updates current events into scenarios
- System compatible with DoD common operating picture program of record (i.e. C2IE)

## 5-10 YEARS

- Persistent backlog of data for baseline and emerging requirements
- Fully integrated into all CTC and JCS Exercises

# TEAM BLUE 1

# 3

**Problem:** User Interface/ User Experience isn't intuitive causing inefficient use of time

0-2 YEARS: Gain understanding of User experience and user experience research and, through collaboration, clearly define the requirements for the operator level

2-5 YEARS: UX/UI design with feedback loops to ensure highest quality product

5-10 YEARS: Implementation and readjustment



# TEAM GREEN 2

# 3

## Topic #411: Evolving to match future environments

### 0-2 YEARS

- Mimic current operational environment + update with real world pulls
- Incorporate current Best of Breed capabilities
- More realism into the training environment
- Development fostered by the determined leader (currently Air Combat Command) with stakeholder input

### 2-5 YEARS

- Advanced tool and capability development e.g. focused on analysis of data and sentiment

### 5-10 YEARS

- Metaverse (or similar with bots and face generation tech) training scenarios and integration

# TEAM GREEN 1: Shape Time/Space During the Competition Phase

# 3

0-2 YEARS

Scenario writers capable of producing base documents  
Template with interchangeable variables  
Schedule exercise data and systems available D-180

2-5 YEARS

System access from home station and training environment

5-10 YEARS

Failing Fast

# TEAM RED 2 – IRC incorporation

# 2

0-2 YEARS - ID appropriate stakeholders

2-5 YEARS- build out prototype platform that is robust enough to incorporate EW, Cyber and PO within the same system

5-10 YEARS- Real to Virtual



# TEAM YELLOW 1: develop AI policy to enforce synthetic training

# 2

0-2 YEARS: define parameters and establish common lexicons for synthetic internet. Develop training objectives for maneuver commanders to utilize IO capabilities.

2-5 YEARS: provide funding and establishment of doctrine. Begin implementing at unit levels.

5-10 YEARS: policy and investment into AI / Synthetic systems. Develop process to fully normalize utilization of Synthetic Internet and have all echelons versed in maneuvering through said systems.

# TEAM YELLOW 2

# 2

Interoperability with partner force

0-2 YEARS

- Create an exportable SIE that can be used to train and build partner force capacity

2-5 YEARS

- Replicate SIE for training operations in the information environment with partner nations

5-10 YEARS

- SIE is fully integrated in combined exercises

# TEAM BLACK 1

# 2

Problem: Lack of interoperability and Integration (97)

0-2 YEARS: Identify gaps where interoperability fail and where integration is absent. Solicit buy in from all IRCs and DoD.

2-5 YEARS: Take the requirements with defined parameters to industry to develop the technical capability which will ensure **interoperability** between government systems commercial off the shelf technology used by all IRCs, training centers, and DoD. Build a community of interest. Develop common data structure.

5-10 YEARS: Implement joint concept. Maintain the community of interest.

# TEAM WHITE 2

# 1

0-2 YEARS: Defining roles and responsibilities of different organizations.

2-5 YEARS: Corp level MDO exercises. SITE is integrated into the different roles while exercising IA.

5-10 YEARS: Continuous evaluation and reinvestment for emerging requirements.

How to integrate other entity capabilities into the whole.

# TEAM BLUE 1

# 1

**Problem:** Scalability through different sizes of training audiences and their training objectives

0-2 YEARS: heavier integration into CTC rotations and War Fighter exercises forcing maneuver commanders to include the information environment in their decision calculus

2-5 YEARS: Implementation of the synthetic environment across the army organization to enable the training of the information environment.

5-10 YEARS: re-evaluation and testing within the CTC rotations.



# TEAM GREEN 1: Knowing Your Customer (Conventional Force Buy-in to Information Domination

0

## 0-2 YEARS

Integration of SOF and Conventional Forces Planners  
Better understanding of the Non-Kinetic environment  
Talent management with LNO's (Liaison Officers)

## 2-5 YEARS

Understanding Information Warfare across Conventional Commands (Accessibility)  
Increase Communication regarding Information Warfare

## 5-10 YEARS

# TEAM GREEN 1: Intelligence and Financial Gap

0

0-2 YEARS

Teach Ignorance

Widespread familiarization on synthetic internet

2-5 YEARS

Using and knowing your ignorance to make informed decisions

~~5-10 YEARS~~

# TEAM PURPLE 1

## Priority 2 Concern: Scalability

# 0

**Issues with scaling of data that enables the user to obtain crowd sourcing data or products required to impact the IE**

0-2 YEARS Identify data requirements at the BN level to substantiate programs like Greyplan IO, Pathfinder, etc

2-5 YEARS Assess identified data through AI/NLP to validate enterprise training requirements

5-10 YEARS Employ data to validate objective training scenarios

# TEAM PURPLE 2

# 0

## Concern: Scalability

seamless use at every echelon from detachment to Division

### 0-2 YEARS Plan

- 1) Needs statement/assessment
- 2) Community of interest collaboration & output (gov, academia and industry)

### 2-5 YEARS Plan

- 1) RDT&E w/ All Army requirements
- 2) Acquisition
- 3) Funding

### 5-10 YEARS Plan

- 1) Policy
- 2) Refinement
- 3) Review

# TEAM RED 1

# 19

Topic 17: How do we create compatible solutions that are interoperable

Topic 149: need a service-wide or joint requirement for better synthetic environment

Topic 404: Compatibility, incorporation of real-world-mimicking social-media and other platforms

# TEAM WHITE 1

## Standardized scenario/exercise framework

# 0

### 0-2 YEARS

Standardized MOP for injects in IE

Established criteria to evaluate WfF from an information and human dimension perspective.

### 2-5 YEARS

Integrate the standardized MOP into institutional training and education

Integrate into unit-based platforms

Integrate physical and "synthetic" effects into live virtual constructive systems and into feedback to maneuver units

### 5-10 YEARS

Modernize



# TEAM WHITE 2

# 0

0-2 YEARS: SITE integrated in the requirements division in the J7.

2-5 YEARS: GCC/TSOC in appropriate joint exercises in respective COCOM in a singular environment.

5-10 YEARS: All IRCs are fully represented

Need to train and demonstrate a trusted capability IOT drive GCC/TSOC knowledge and establish requirements.

# TEAM YELLOW 1

0-2 YEARS: Mass database build, add filling to scenarios. Solution: hire third party to mass aggregate scenario and information. This could be achieved by outsourcing (through 3rd party) or through implementation during CCC, SLC, or qualification courses. This would facilitate a better understanding of systems as well.

2-5 YEARS: build system interoperability between as many different platforms as possible (ION, SITE, etc.). Pick a singular platform and ensure all tools work on that system that can also be used while deployed (babelstreet, Pulse, Artisan, etc.)

5-10 YEARS: policy and investment into AI / Synthetic systems. Develop process to fully normalize utilization of Synthetic Internet and have all echelons versed in maneuvering through said systems.