Collaborative Partner Environment (CPE)
AFCEA Conference

CCJ6
MAJ Kortabani (CPE Innovation Lead)
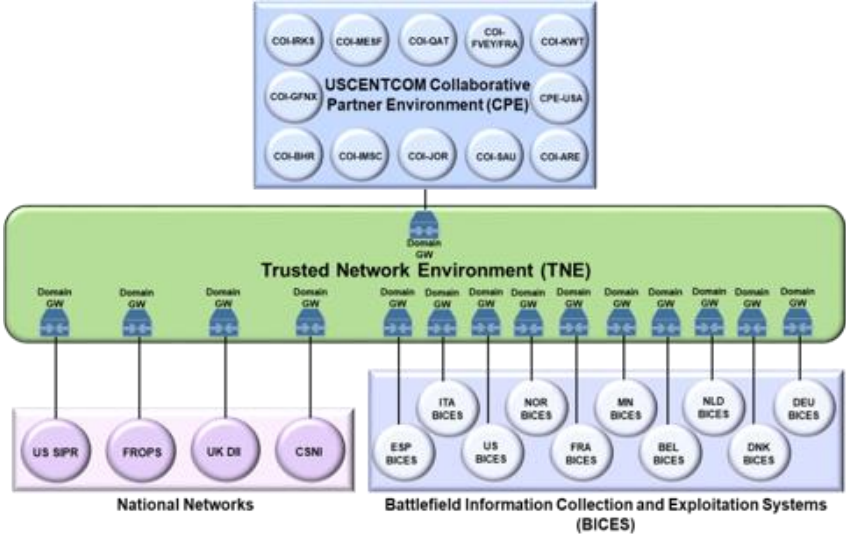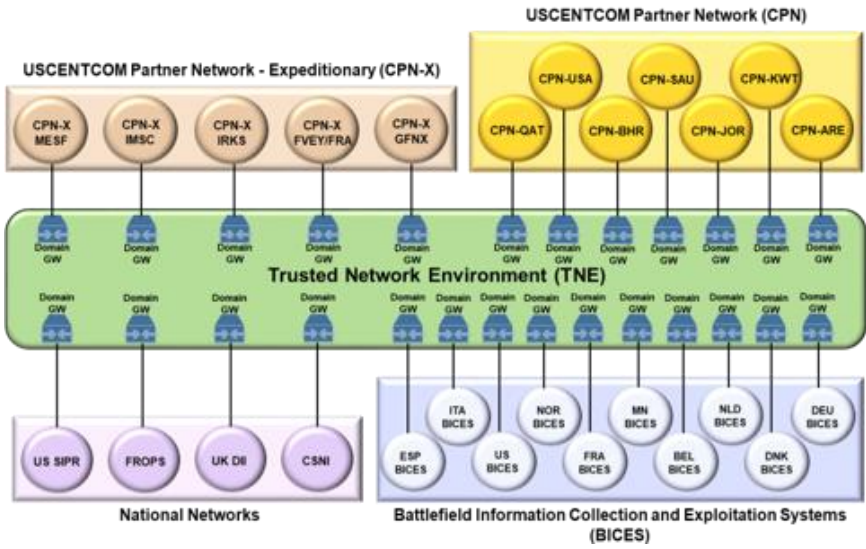
17 August 2022

The overall classification of this brief is
UNCLASSIFIED

Mission Partner Environment: Problem Statement

USCENTCOM requires an agile network to support all Mission Partners at the speed of the operation

- **USCENTCOM manages 12 *distinct* REL networks**
- Yesterday…stove piped networks
- Data flows "North/South" only

- Data ***CAN*** flow "East/West" as well
- Security "baked-in" at data level

Network Centric ———————————— **Data Centric**

Allows all coalition nations to operate in one collaborative environment

Mission Partner Environment: DoD Policy and CCDR Directives

- **DoD Memorandum "Guidance to Support Rapid and Agile Sharing of Secret Releasable Information with Mission Partners"**
  - Released 10 March 2020
  - Clarified that all SEC//REL networks are of the same Security Domain
  - CDS is not required if Alternative Security Measures are implemented

- **DoD Memorandum "Threshold Guidance for Implementing Security Mechanisms within Mission Partner Environment Information Domains"**
  - Released 5 October 2020
  - Lists the Alternative Security Measures

- **USCENTCOM CDR "Mission Partner Environment" Memo to the Secretary of Defense**
  - Released 7 Dec 2020
  - Conveys USCENTCOM intent to rapidly move to data centric MPE called Collaborative Partner Environment (CPE)

- **POTUS Executive Order 14028 "Improving the Nation's Cybersecurity"**
  - Released 12 May 2021
  - Calls for the DoD and all federal agencies to advance Zero Trust Architecture

Collaborative Partner Environment (CPE): Data-Centric Technologies
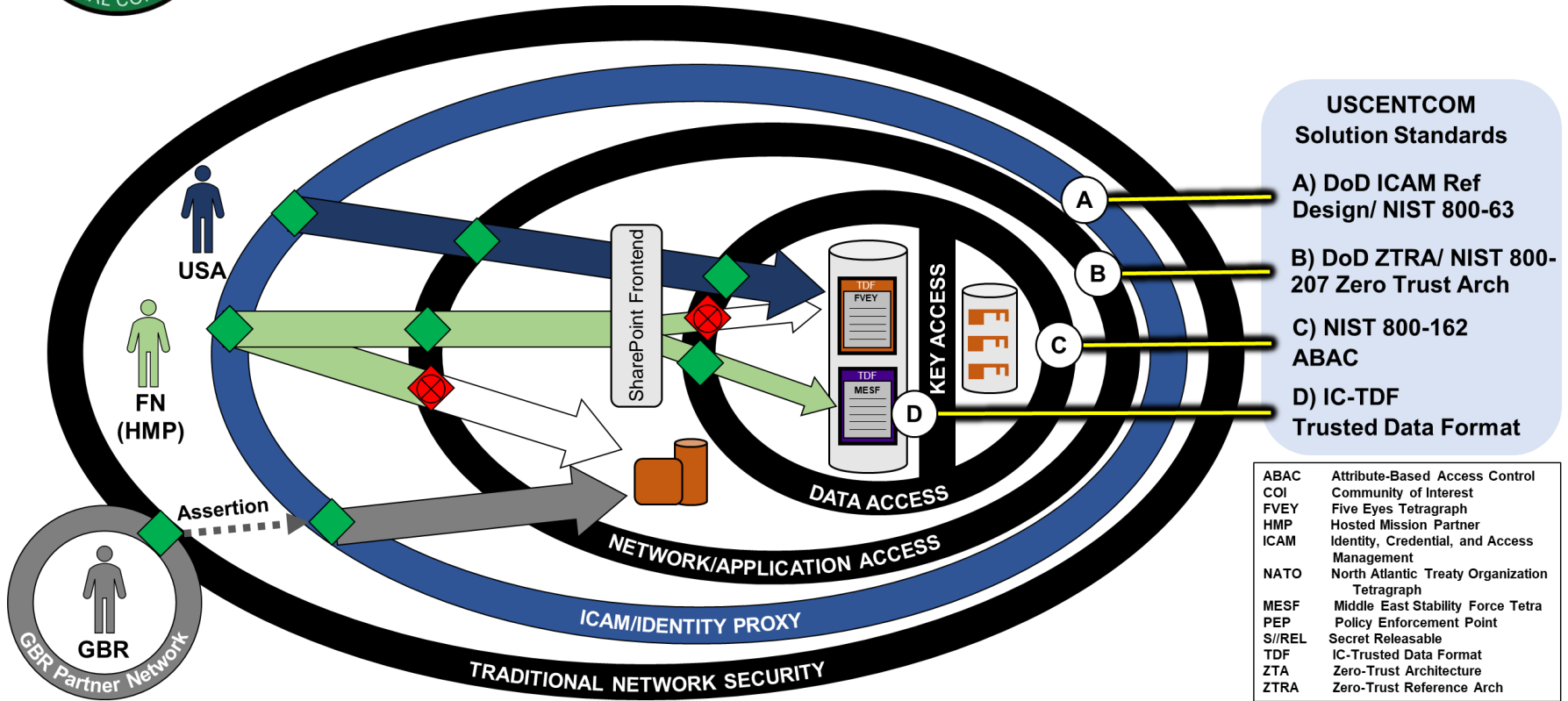
USCENTCOM Solution Standards

A) DoD ICAM Ref Design/ NIST 800-63

B) DoD ZTRA/ NIST 800-207 Zero Trust Arch

C) NIST 800-162 ABAC

D) IC-TDF Trusted Data Format

ABAC	Attribute-Based Access Control
COI	Community of Interest
FVEY	Five Eyes Tetragraph
HMP	Hosted Mission Partner
ICAM	Identity, Credential, and Access Management
NATO	North Atlantic Treaty Organization Tetragraph
MESF	Middle East Stability Force Tetra
PEP	Policy Enforcement Point
S//REL	Secret Releasable
TDF	IC-Trusted Data Format
ZTA	Zero-Trust Architecture
ZTRA	Zero-Trust Reference Arch

Legend:
- User
- External Network Identity Provider
- TDF AAAA — Tagged Data from Specified COI in TDF wrapper
- Datacentric Mission Command Application
- Datacentric Database
- Legacy Mission Command System
- Validated Identity
- Identity Claim/Assertion
- ABAC — Security Control
- Access Approved
- Access Denied

CPE is a single S//REL environment that allows for information sharing with partners in support of Joint All-Domain Command and Control (JADC2).

Questions?

CPE Points of Contact

Briefer:
MAJ Elias Kortabani
CPE Innovation Lead
elias.s.kortabani.mil@mail.mil

CENTCOM MPE Program Office:
LTCOL FM (Wing CDR) Robert Basford
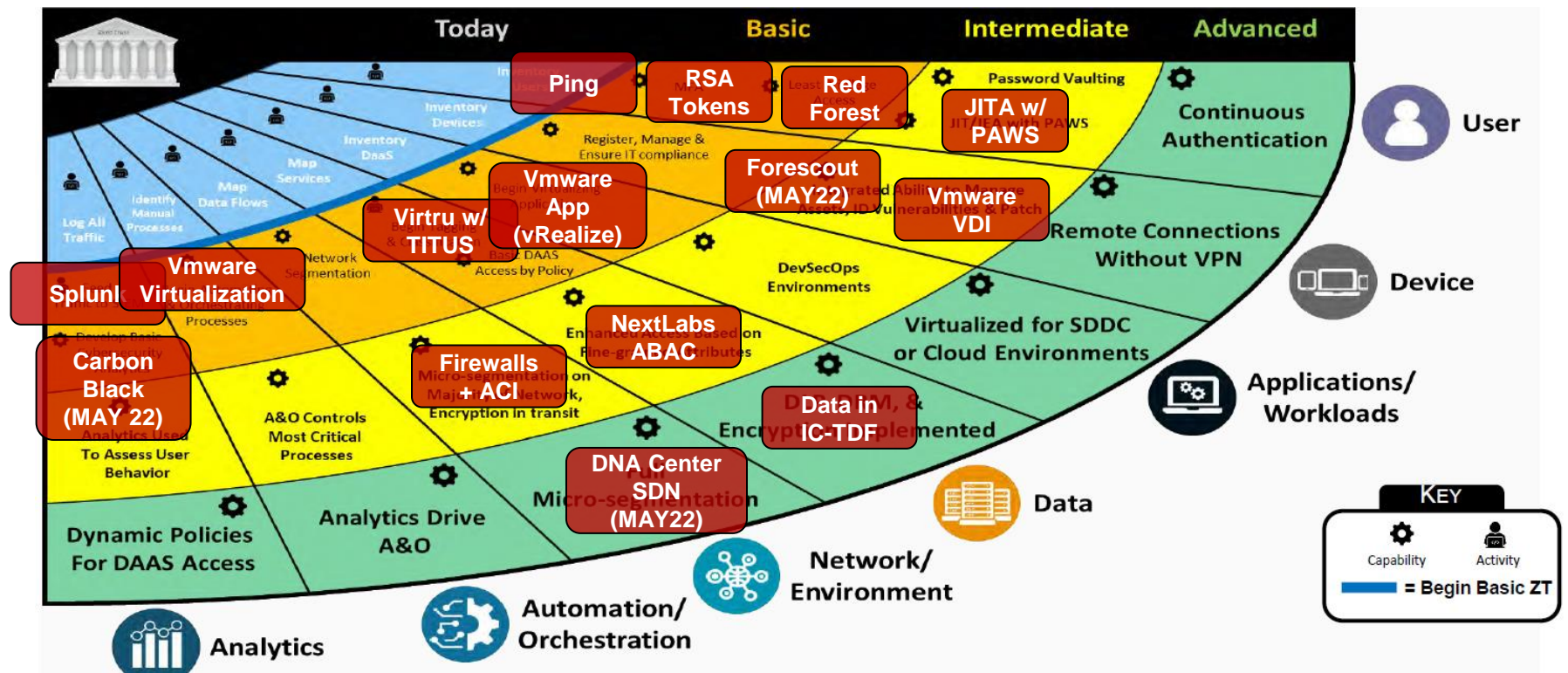MPE Deputy Program Manager
robert.basford2.fm@mail.mil

Mr. Brendan Hall
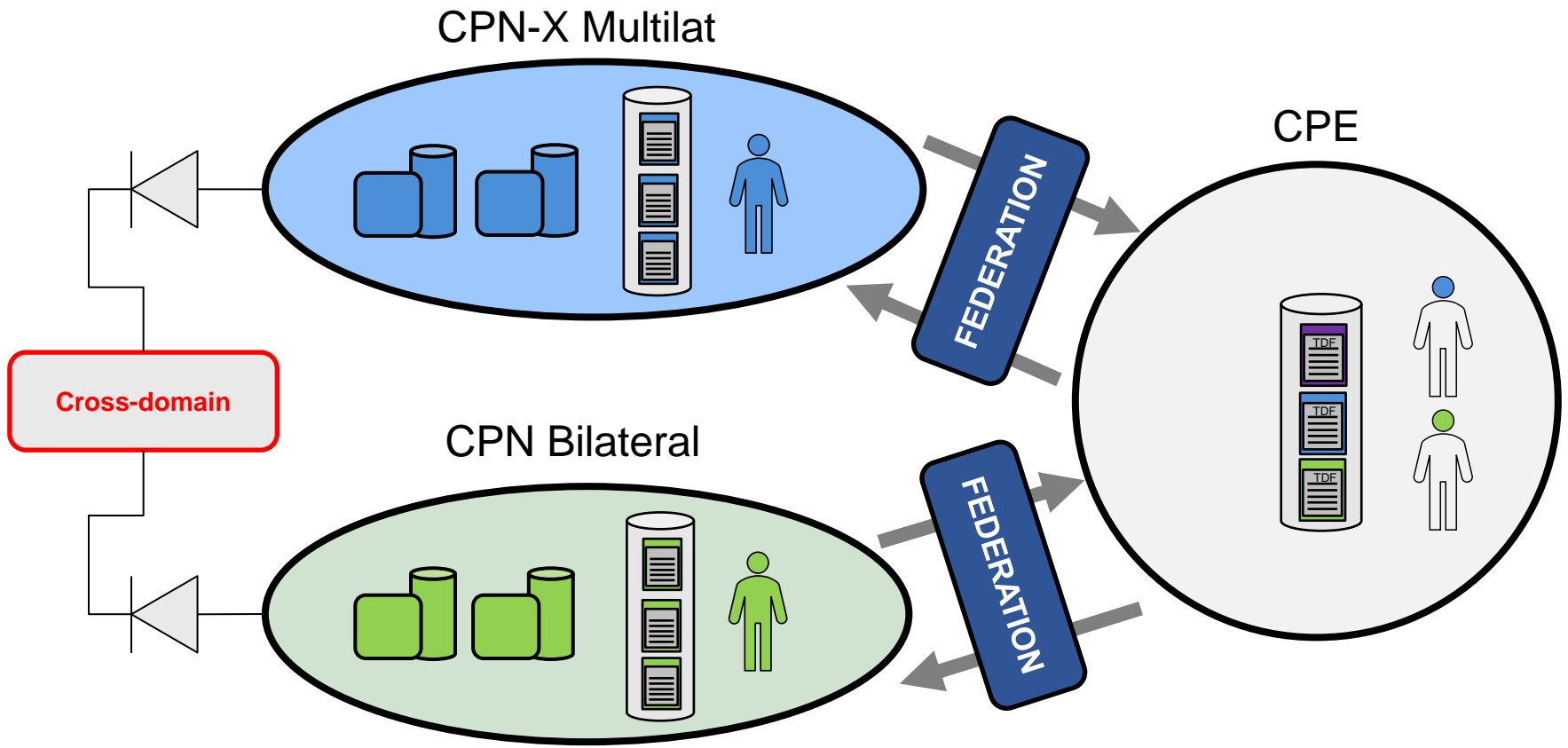MPE Deputy Program Manager
brendan.m.hall.ctr@mail.mil

CPE Zero Trust Mapping 16Aug22

Phase 1: Federation

CPN-X Multilat

CPE

FEDERATION

Cross-domain

CPN Bilateral

FEDERATION

TDF

TDF

TDF
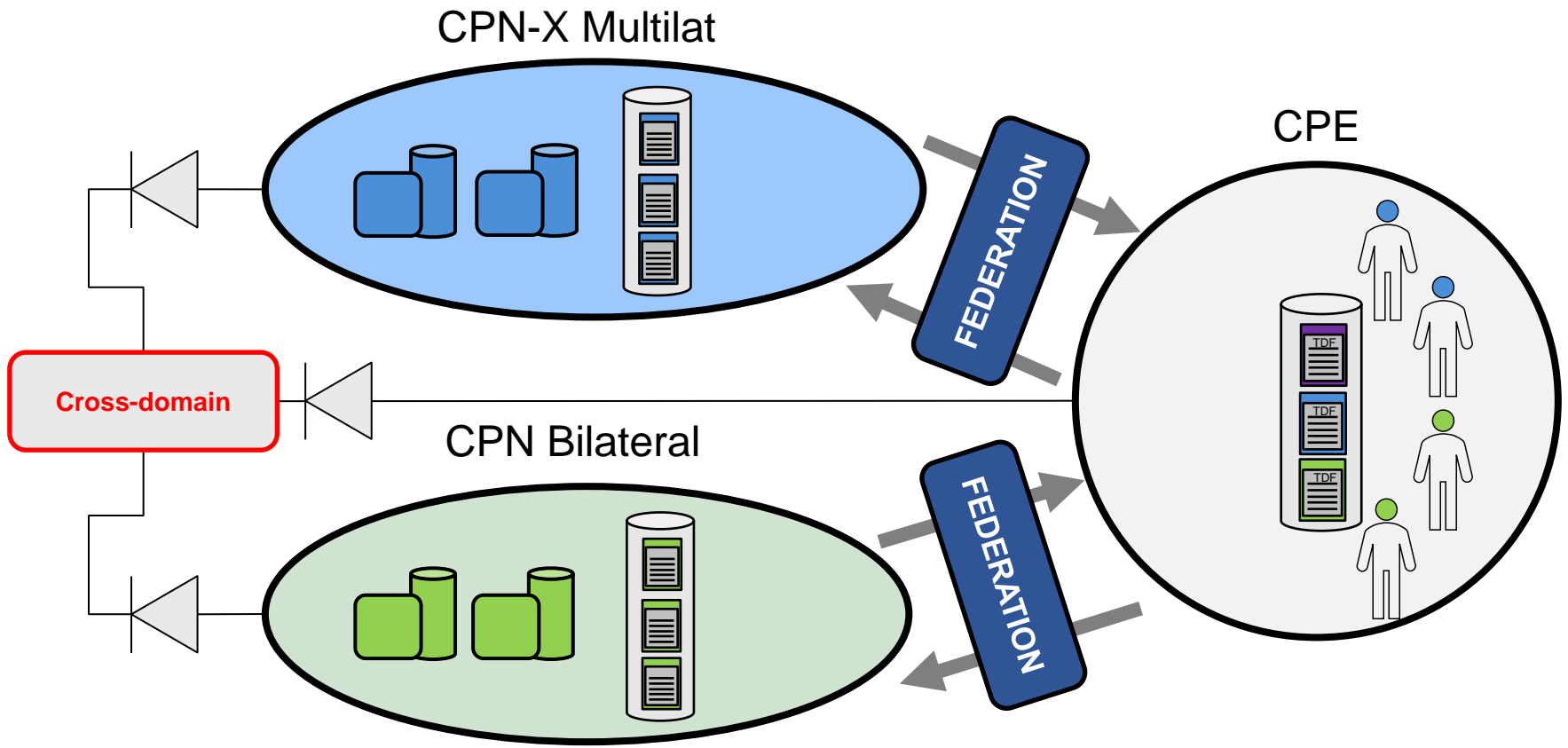
Impact to CPN-X/CPN:	Impact to CPE:
• CPN-X/CPN users will continue to operate as before on their multilateral and bilateral mission networks. • CPN-X/CPN users can use the CPE to pass information between mission networks without using a cross-domain.	• CPE users will be able to access mission command systems and legacy data on the mission networks.

8

Phase 2: User Migration

CPN-X Multilat

CPE

Cross-domain

CPN Bilateral

FEDERATION

FEDERATION

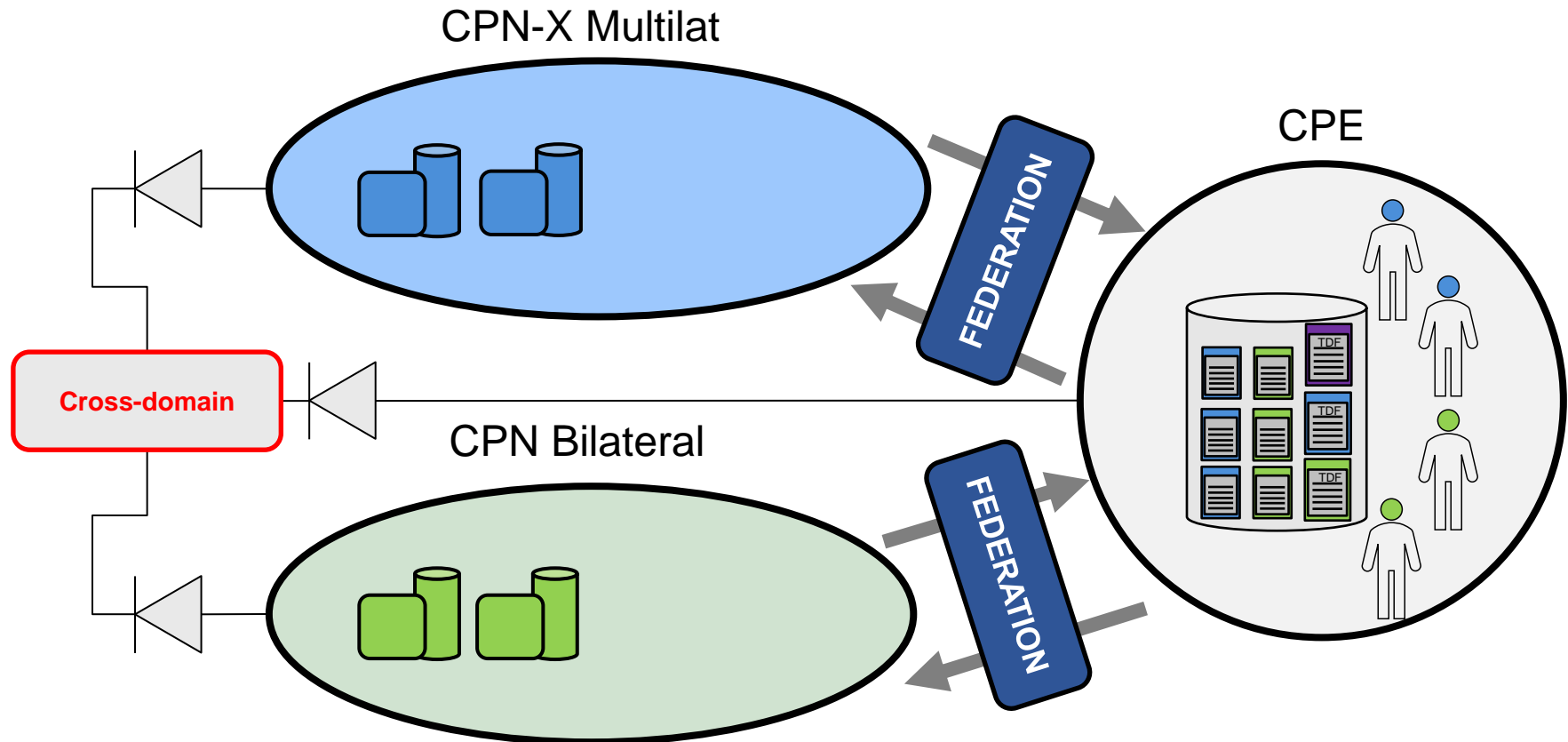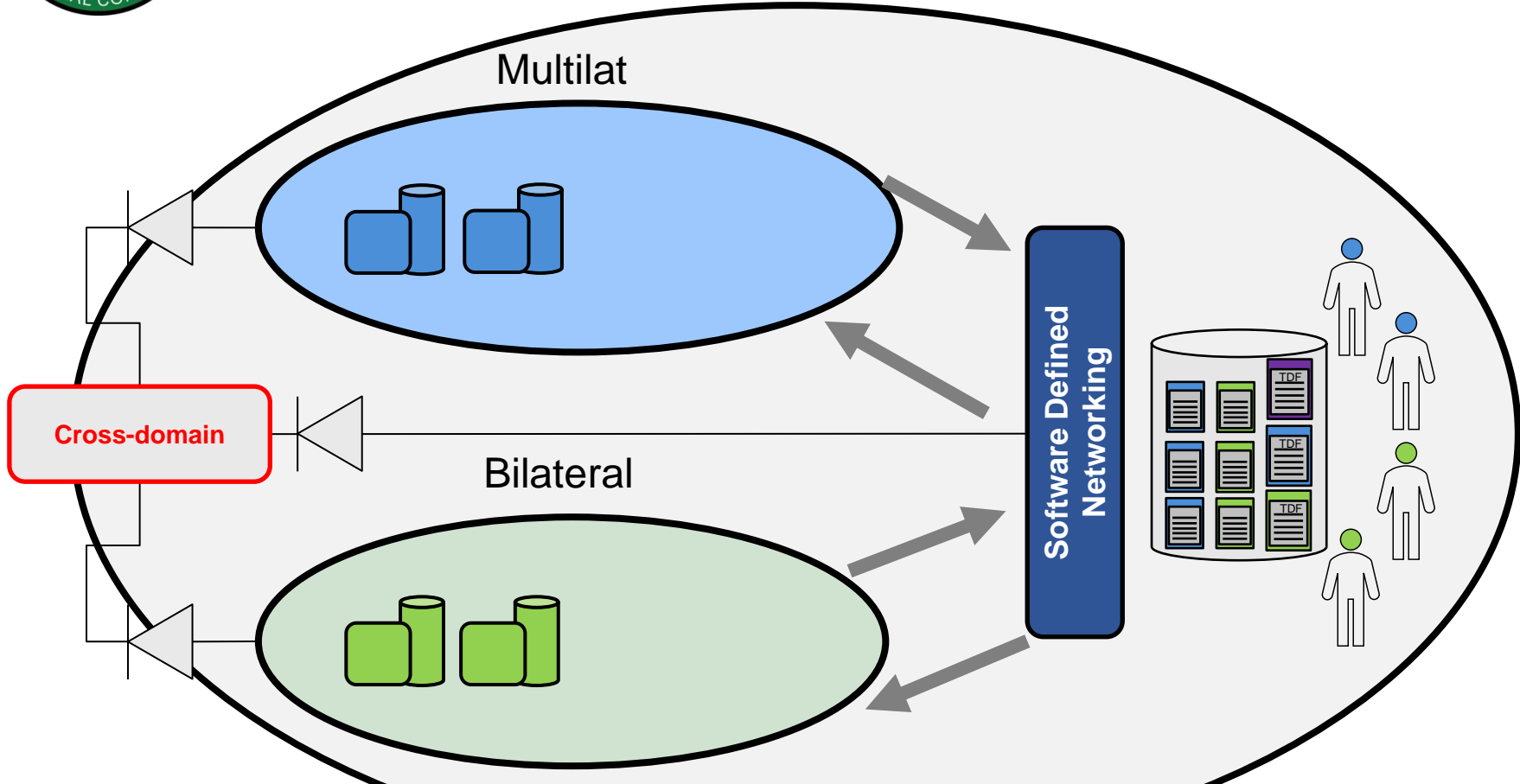| Impact to CPN-X/CPN:	Impact to CPE:
• All CPN-X/CPN users will receive a new account/email and their multiple legacy account/emails will be deprecated.	• CPE users and systems will be able to transfer information through the cross-domain to SIPR.

9

Phase 3a: Data Migration

CPN-X Multilat

CPE

FEDERATION

FEDERATION

Cross-domain

CPN Bilateral

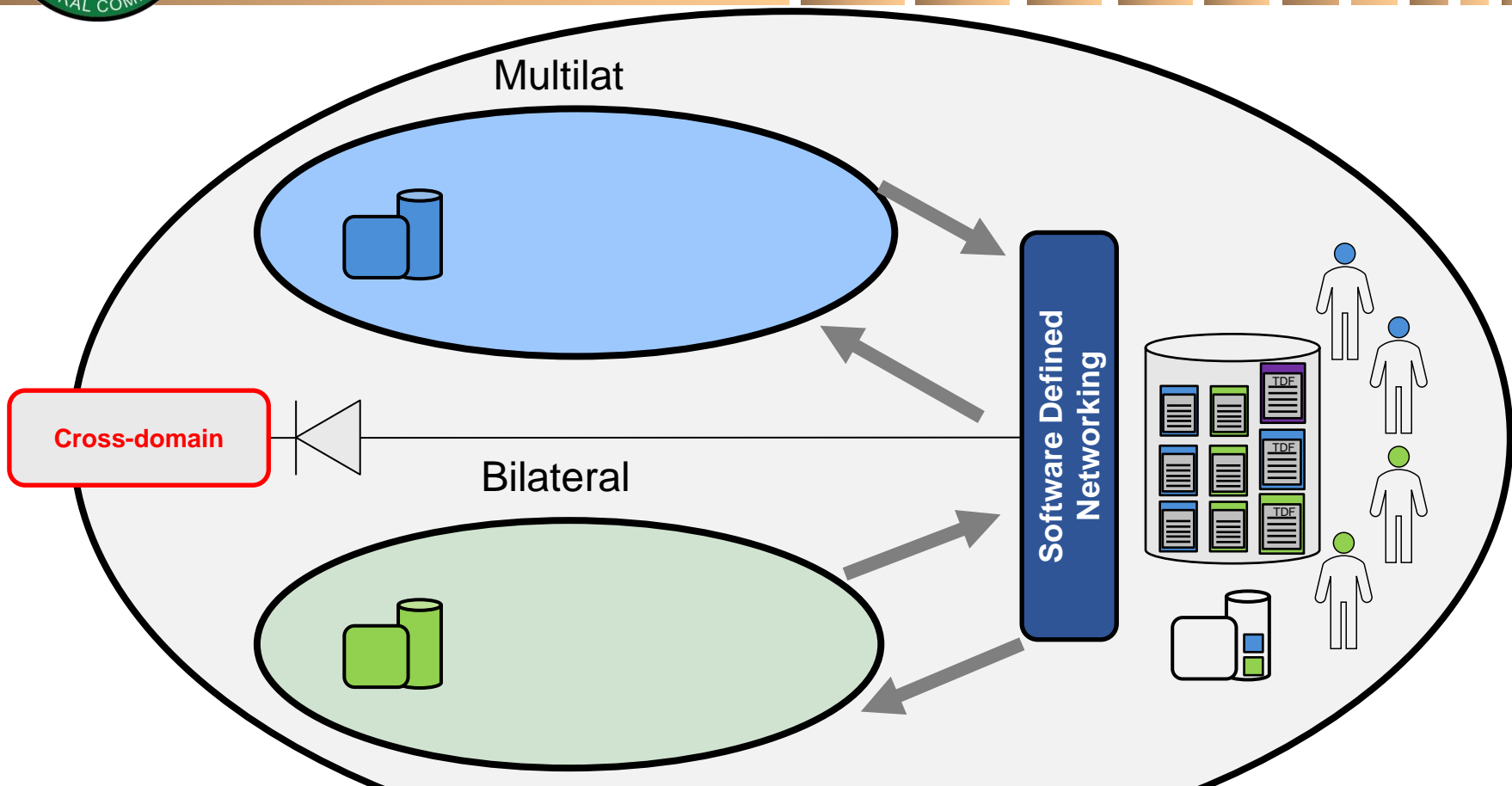| Impact to CPN-X/CPN:	Impact to CPE:
• Mission SharePoint decommission following bulk-tagging of the data and transfer to CPE SharePoint.	• All users have access to the appropriate mission data held in the CPE SharePoint.

Phase 3b: Network Migration

Multilat

Cross-domain

Bilateral

Software Defined Networking

Impact to CPN-X/CPN:	Impact to CPE:
• Mission Command will require some amount of reconfiguration as the domain is changed to CPE. • CPN-X/CPN nodes reconfigured as CPE nodes.	• No change for CPE users.

Phase 3c: Application Migration

Impact to CPN-X/CPN:
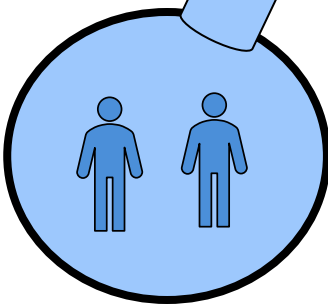- Some data-centric Mission Command is removed from the CPN-X/CPN microsegments and placed within the CPE.
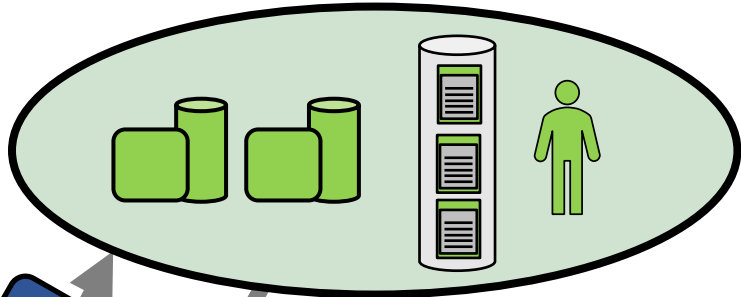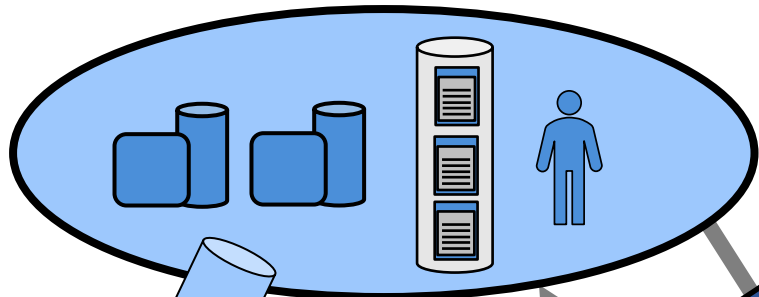
Impact to CPE:
- Total number of duplicate Mission Command systems is reduced.
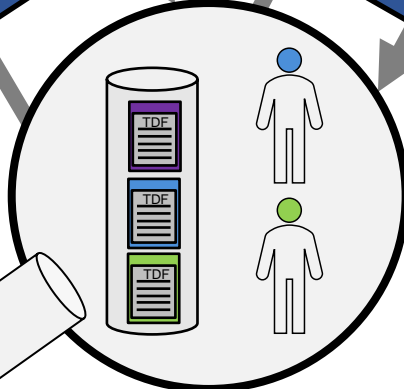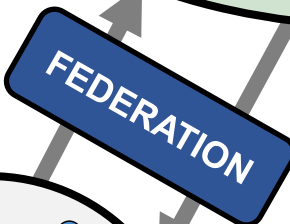
CPE at IL23

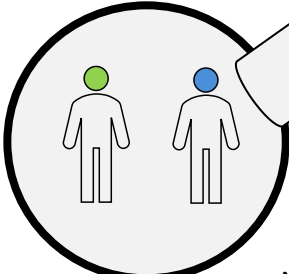CPN-X FRA, FVEY

CPN-X MESF

FEDERATION

FEDERATION

CPN-X FRA, FVEY (UK)

Note: CPN-X FRA, FVEY will
also be extended to CAN & FRA

CPE (US)

CPE (UK)

Note: JCSE is being utilized to extend CPE

UK CDE - CPE Federation

CENTCOM

CPE

MULTILAT MICRO-SEGMENT

BILAT MICRO-SEGMENT

C2IE

Test Data Only

Enduring connection

FEDERATION

CDE (UK)

C2IE
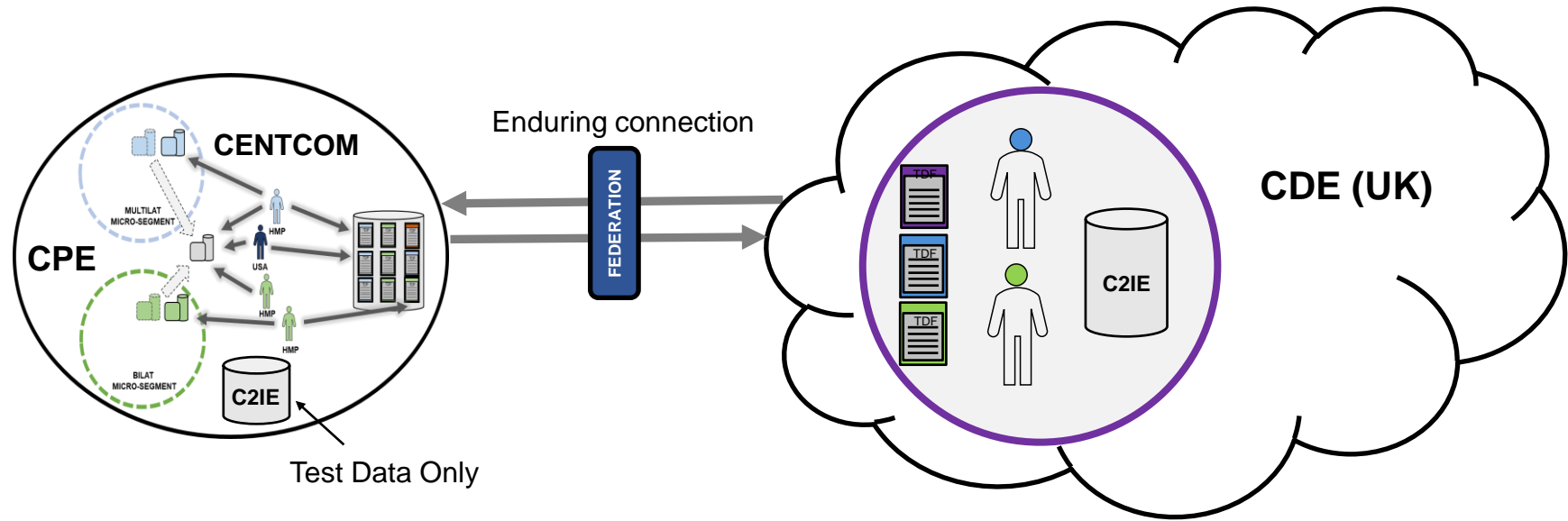
Potential Services

- Protected Chat/Email/ File Share
- Voice/Video
- DCS/NCS MSN command
- DCS/DCS MSN command (FMV, COP)
- SIPR Cross-domain
- SDN (ZT)
- Access Control Code