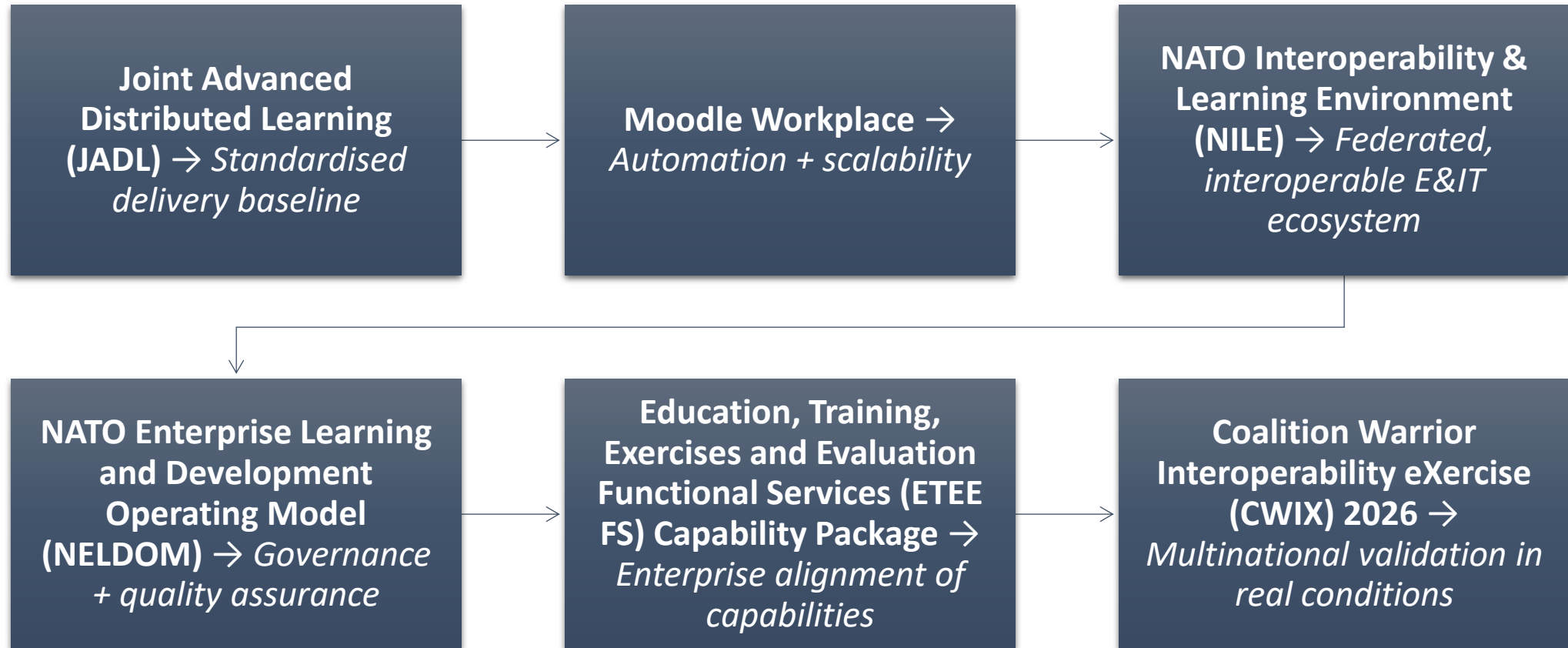


From Legacy Systems to a Unified NATO Digital Learning Environment: Enterprise Transformation, Interoperability, and the Road Ahead

Cem Kumsal | Training Technology SO | TIDE SPRINT

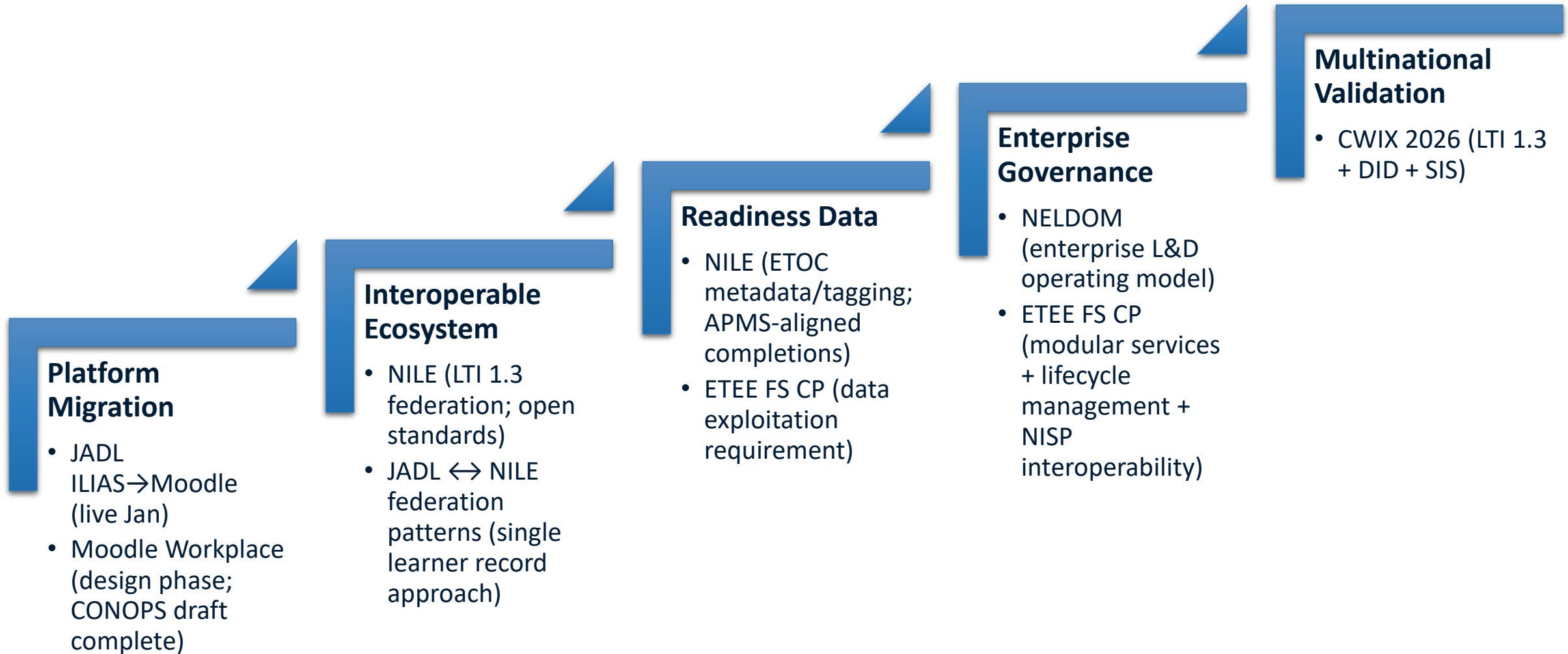
Version May 2026

What We've Achieved and What It Enables



We are moving from isolated systems to a connected, enterprise learning ecosystem

How This Enables NATO Digital Transformation



What We Need From This Group

- **From awareness → to action**
- **We need your support to:**
 - Define priority interoperability use cases
 - Align on learning data and metadata approach
 - Nominate CWIX participants
 - Identify integration opportunities

- **◆ Outcome:**

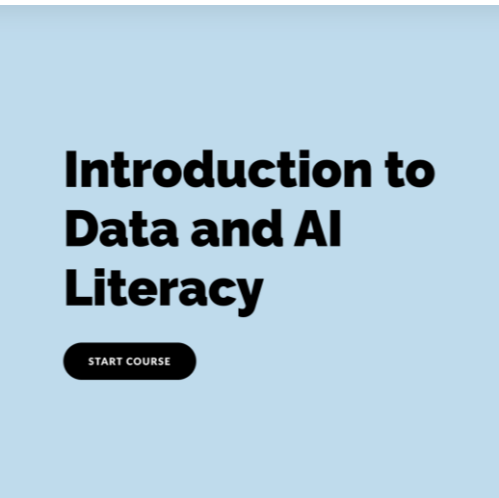
A coherent, NATO-wide approach to digital learning



Welcome to the NATO Learning Management System!
This is the course Homepage. You are welcome to explore all of the learning opportunities offered.

JADL SERVED NATO FOR MORE THAN 15 YEARS ON ILIAS

Migration to Moodle marks a major modernization milestone, fully aligned with **E^{TEE} Functional Services (FS)** and **Digital Transformation** goals.



JADL Migration to Moodle

Modernised delivery baseline aligned with NATO direction

- Migration completed
- Stable operational baseline
- Aligned with Moodle ecosystem across NATO
- Foundation for interoperability and analytics

Why it matters to you

- Easier integration
- Reduced fragmentation across NATO
- Ready for future AI/data-driven capabilities

Operational indicators

Active users/month:
**from a couple
hundred → 3000+**

Courses
migrated/published:
180

Support tickets:
Week 1 = 28 → now 3

The platform is now stable and ready for expansion, integration, and experimentation.

Moodle Workspace Multi-Tenant



TENANT STRUCTURE PROPOSAL

TENANT SPECIFIC FEATURES

TENANT BENEFITS

NATO Tenant	Core organizations and HQs	<ul style="list-style-type: none"> • Individualized Branding • Administrative Space • Course catalog • Controlled data segregation • Shared interoperability and reporting via NATO governance 	<ul style="list-style-type: none"> • Scalability to host thousands of users across NATO and Partner Nations • Easier collaboration through controlled federation • Reduced duplication of effort and increased content reuse 		
Partner Tenant	PfP, MD, ICI and other partner access				
E-ITEP Tenant	E-ITEP community and individual national schools				
TRANSNET Tenant	Training transformation and collaboration				
Operational Future Tenants	NSO, NDC, COEs, etc.				

Adaptive Learning & Data

Shift toward data-driven learning

- Adaptive learning for personalised training
- Learning analytics for performance insight
- Structured data collection across systems

Why this matters beyond E&T

- Supports readiness reporting
- Enables competency tracking
- Informs capability development

Key question for this group:

Where else can this data create value across NATO?

NILE: Federated E&IT Ecosystem

Interoperable platform model

- NPCL-hosted Moodle
- Federation model across NATO and nations
- Integration with Allied Personnel Management System for readiness reporting
- Embedded governance and QA

What's in it for Nations:

- No need to build everything locally
- Maintain national control while enabling federation
- Plug into a NATO-wide ecosystem

NELDOM + ETEE FS

Governance and enterprise coherence

- Standardised governance model
- Quality assurance processes
- Alignment across NATO initiatives

Why you should care:

- Reduced fragmentation
- Trusted and comparable training outputs
- Clear structure for collaboration



Interoperability is not about systems talking to each other. It is about people learning together, at scale.

CWIX is NATO's **flagship interoperability exercise**, led by HQ SACT and held annually at **JFTC Bydgoszcz**.

Its mission: **Test** and **improve** NATO and partner systems' ability to **operate** together effectively.

Focus Areas:

Testing **C4ISR systems**

Ensuring seamless **data sharing** and **communication**

Validating emerging technologies

Participants: Over 30 nations, NATO entities, industry, academia, and operational users

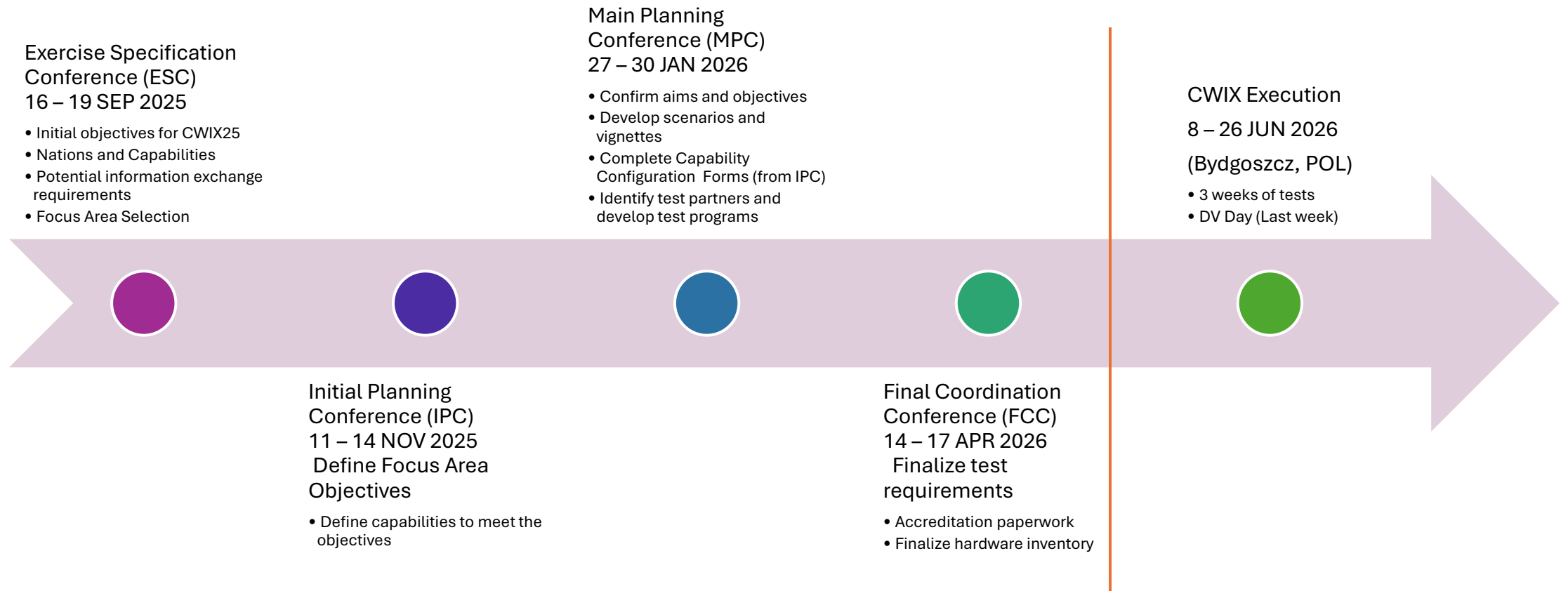
Importance: Ensures **technological readiness** and enables NATO to function as a **unified force** in complex operations.

CWIX

Turning
Interoperability
from Policy into
Proven Operational
Capability.



CWIX 2026 Milestone events Timeline



Objectives for CWIX 2026

01

Test connecting to remote content – LTI

- Single Test Case required

02

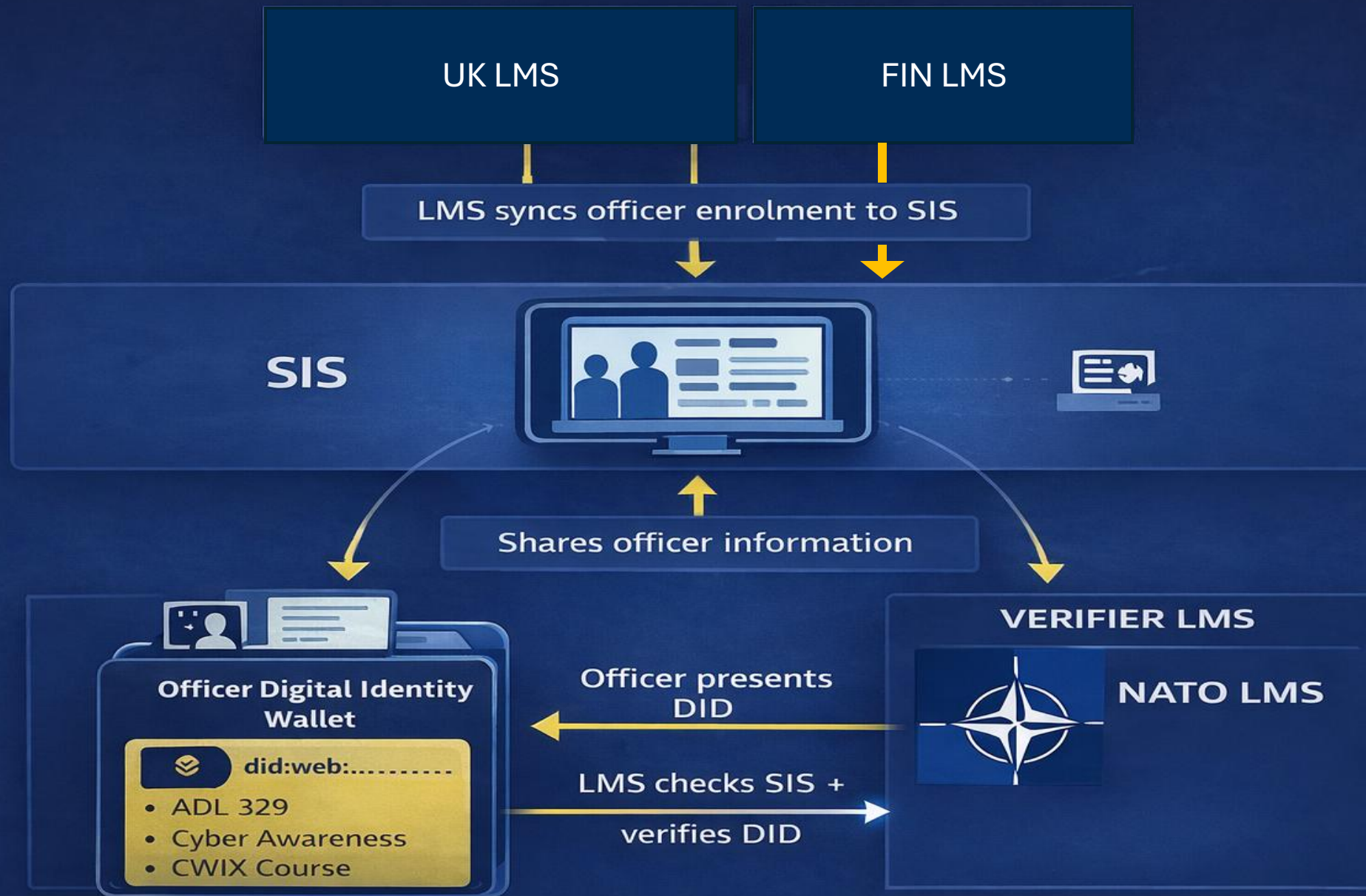
Test Student Information Systems (SIS)

- Solves multiple student/trainee account problem.
- Very well-established technical standard. Moodle and many other systems support.

03

Test Decentralised Identifiers (DIDs)

- Solves list of learning resources problem.
- Well established technical standard, but “new” to T&E space.
- Use cases outside of T&E space.



Multinational Validation

CWIX 2026

- Testing interoperability in real conditions
- NATO + national LMS integration
- Standards under test:
 - LTI 1.3
 - DID
 - SIS

Opportunities for Nations:

- Test their systems in NATO environment
- Validate before operational deployment
- Influence future standards

What we need:

- Participating nations
- Use cases
- Technical engagement

NATO Training Technology Conference

September 8 – 10 2026, Lisbon



 **NTTC 2026**
NATO TRAINING TECHNOLOGY CONFERENCE

Navigating the Future of NATO Training

INNOVATION • INTEROPERABILITY • RESILIENCE

THEME
Human-AI Co-Learning:
Building Resilient, Interoperable, Trusted Training Ecosystems

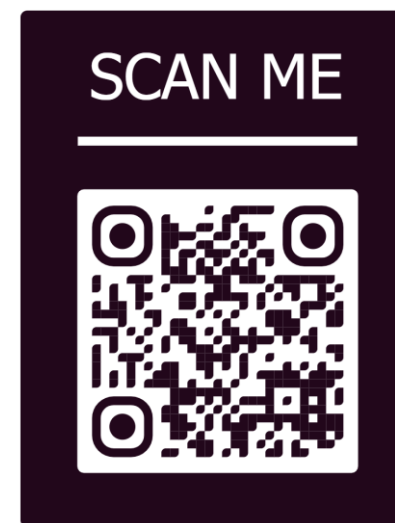
The NATO Training Technology Conference brings together military, academia, and industry leaders to shape the next generation of education and training.

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 PEOPLE Building a culture of learning	 TECHNOLOGY Harnessing AI and emerging tech	 INTEROPERABILITY Connecting systems and allies	 TRUST Secure, ethical, and reliable	 RESILIENCE Strengthening readiness for tomorrow
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Submit an abstract and contribute to NATO's training transformation.



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Discussion

Questions and answers

Contact

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