Australian TDL Interoperability Summit
The ADF TDL Certification Process

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- Accountabilities and responsibilities

- TDL Certification Products and Services

- Rationale for TDL Certification

- Intent of TDL Certification

- TDL Certification Process

- Summary

- Joint Capabilities Group is the Capability Manager for the Joint Data Network (JDN) which includes Tactical Data Links.

- JCG chairs the JDN Capability Management Board (CMB) provides guidance and direction to platform CMs to enable their platforms to be certified to connect to ADF and allied JDNs.

- The Australian Defence Force Tactical Data Link Authority supports JCG in the coordination, conduct, assistance, and assurance of ADF TDL interoperability.
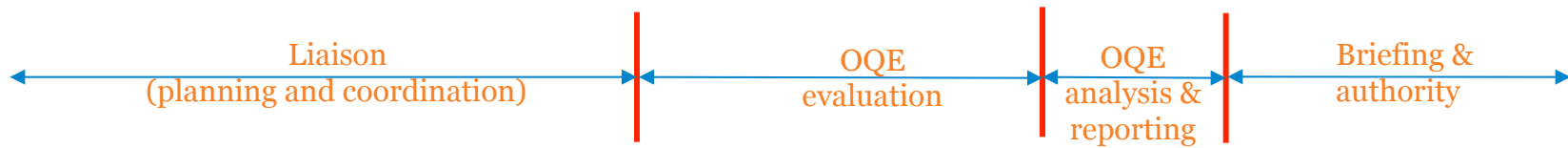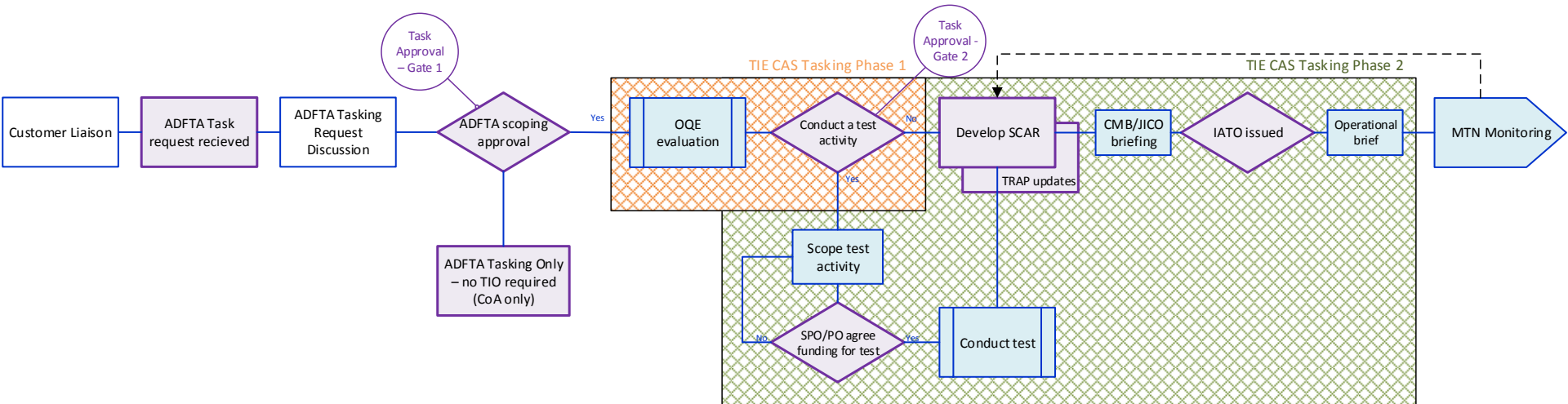
- ADFTA supports JCG in coordinating, conducting, assisting, and facilitating the ADF TDL certification process, through;

  - Provision of specialist advice on TDL Test and Evaluation, including input to IPTs, Working Groups and Reviews
  - Undertaking Conformance To Standards Testing (CTS), Through Air Testing (TAT) or Preview Test and Evaluation (PT&E)
  - Identifying Objective Quality Evidence (OQE) requirements and conducting OQE Assessments
  - Development of Standards Compliance Assessment Reports (SCARs)
  - Development and presentation of Operational Briefs
  - Drafting the Interim Authority to Operate (IATO) for the JICO

**** Early engagement is essential ****

- TDL's Standards are detailed, complex and can be interpreted differently (MIL-STD-6016F is 11,410 pages)

- TDL's advisory but are essential to mission effectiveness.

- There have been occasions where TDL implementation and integration has been poor and has impacted cost and schedule.

- Platform Interoperability issues have been identified late in the development lifecycle which has resulted sub optimal capability.

- The ADF TDL Certification is a risk based assessment that provides assurance that the platform/product will not have an adverse impact on the Joint Data Network.

- Required where there is a change to the software or hardware that effects the performance of the platforms TDL implementation

- ADF TDL Certification currently culminates in an Interim Authority To Operate (IATO) to join the JDN.

- The process also assesses interoperability assurance for platforms operating on the JDN

Task Approval – Gate 1
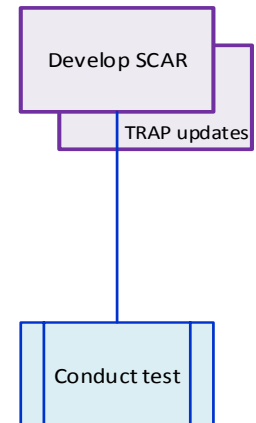
Task Approval - Gate 2

TIE CAS Tasking Phase 1

TIE CAS Tasking Phase 2

| Customer Liaison | ADFTA Task request recieved | ADFTA Tasking Request Discussion |

ADFTA scoping approval

ADFTA Tasking Only – no TIO required (CoA only)

Yes

OQE evaluation

Conduct a test activity

No

Develop SCAR

TRAP updates

CMB/JICO briefing

IATO issued

Operational brief

MTN Monitoring

Yes

Scope test activity

No / SPO/PO agree funding for test / Yes

Conduct test

Liaison
(planning and coordination)

OQE
evaluation

OQE
analysis &
reporting

Briefing &
authority

- Certification includes detailing TDL technical compliance, including any Restrictions or Notes.

  - RESTRICTIONS – when a degraded system or function causes major degradation in Situational Awareness or network wide problems

  - NOTE – issues operators need to be aware of with the performance of a system

- Provides the authority to join the Joint Data Network for a software baseline

- Can be used by the Capability Manager to demonstrate that the TDL aspects of a platform are ready to transition to OT&E

- Assists end users in understanding the Platforms TDL Capability and Limitations.

- IATOs are available on the DSN

- An operational brief can be provided on IATO outcomes

- Formalises the outcomes of testing or OQE Assessment including all Trouble reports created during the test and any pre-existing trouble reports that remain open

- Is based on the Trouble Reports (TRs) raised within the JC2 T&E Trouble Report Analysis Program (TRAP)

- Outlines potential RESTRICTIONS and NOTES that are suggested for inclusion in the IATO

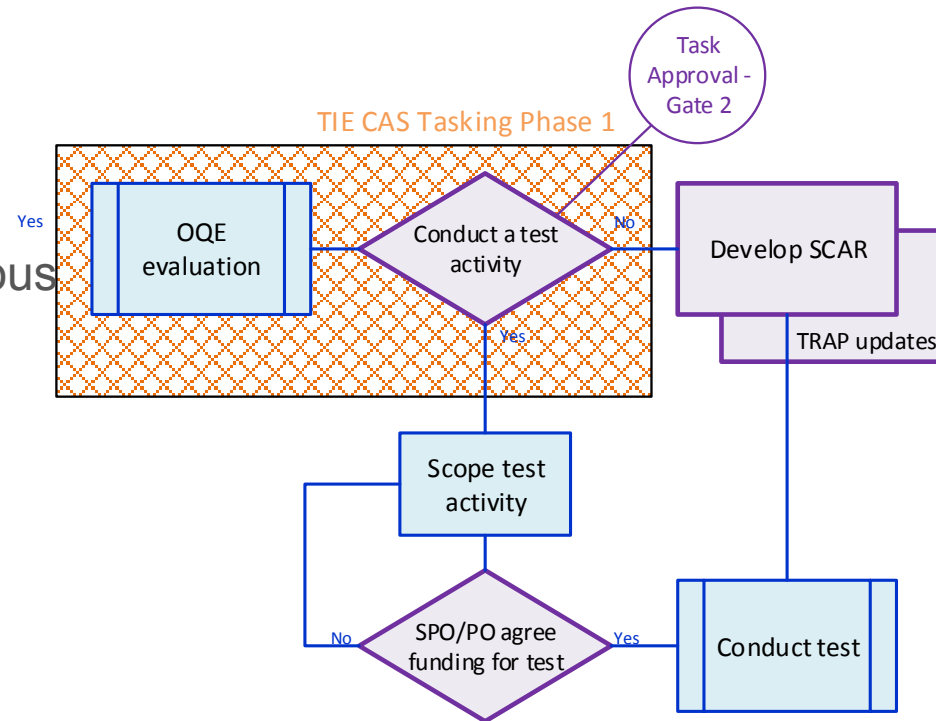- The details in the SCAR are used as the basis for the development of the IATO

Trouble Report Administration Program (TRAP)

- Is a database that tracks all Trouble Reports (TRs) for each platform

- This data is used for interoperability analysis

- The data will be used to update the Capabilities and Limitations database

Develop SCAR

TRAP updates

Conduct test

- A Conformance To Standards (CTS) test gathers additional OQE to make a technical assessment of a platforms level of compliance to the applicable Data Link Standard

- Message level testing performed at a Land Based Test Site (LBTS) or a Through Air Test (TAT) with a platform

- Currently support the following protocols; Link-11, Link-16, JREAP, and Data Forwarding.

- Provides assurance to Capability Managers

- Risk assessment activity, not based on a 'pass and fail', provides characterization of the platform's TDL compliance

- Evaluation of objective evidence created from test activities

- Used to determine if a test is required and to scope the content and extent of a test

- Sufficient OQE is critical to the minimize the time taken to be issued an IATO

  - Examples of OQE are:

  – PRS, PIDD, FPS, OCD

  – Change Descriptions/Log from previous IATO/SR Build

  – DT&E, AT&E TDL related OEM Test procedure, Results, Reports and Certification Letter for SR

  – Closure evidence of previous issues

  – JICO/US(JITC) release documents

TIE CAS Tasking Phase 1

Task Approval - Gate 2

OQE evaluation → Conduct a test activity

Yes / No

Develop SCAR

TRAP updates

Scope test activity

SPO/PO agree funding for test

No / Yes

Conduct test

- The form allows projects and SPOs to formally task JC2 T&E

- Provides a mechanism for JC2 T&E to priortise tasking with JCG

- The form is reviewed and acknowledged and assigned to the applicable team

- The ADFTA Tasking Request form is found on the ADFTA home page

ADFTA Tasking Request

If you have a tasking request or query for any team or section within ADFTA, you must submit a Tasking Request.

Submitting an ADFTA Tasking Request will ensure that your request/query is directed to the correct team or section within ADFTA and will allow us to keep track of its progress using the unique Request Reference Number.

To submit a Tasking Request, please fill out the ADFTA Tasking Request form and then email it to adfta.support@defence.gov.au.

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**** Early engagement is essential ****

- The ADF TDL Certification process provides:

  – The Delivery Agent with an assessment of the platforms compliance to the MIL-STD

  – The CM with confidence that the platform is ready to proceed to OT&E

  – Provides Operators with confidence that the platform is ready to join the Joint Data Network

- Early engagement with ADFTA is essential

Questions?

adfta.support@defence.gov.au