

RA 3140 - Air Traffic Management Equipment End to End Safety

Rationale

Safety of Air Traffic Management (ATM) Equipment ► **will** ◀ be considered on an end to end basis. It ► **will take** ◀ into account all relevant organizations, services, ► **interfaces**, ◀ activities and processes. It needs to include all lines of development and all relevant areas whether internal or external to the MOD. The responsibilities of different organizations and suppliers ► **needs to** ◀ be coordinated to achieve a safe outcome. ► **This Regulatory Article (RA) requires that end to end Safety of all ATM Equipment is considered and managed to demonstrate that the ATM equipment is, or will be capable of being, safe to operate and operated safely.** ◀

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Regulation

3140(1)

Interfaces

3140(1) The ► ◀ Delivery Team Leader (DTL) **shall** ensure all interfaces¹ and dependencies that could affect ATM Equipment Safety are subject to formalized agreements, regardless of the boundaries of a project.

Acceptable Means of Compliance 3140(1)

Interfaces

1. Formal agreements (eg Joint Business Agreements, Internal Business Arrangements and Service Level Agreements) **should** be used to formalize interfaces and dependencies:
 - a. The agreements **should** assist with providing evidence that services outside the project scope can meet the requirements of the project. Eg power, infrastructure, communications links.
2. The ► ◀ DTL **should** raise, as appropriate, formal agreements with:
 - a. Other relevant ► ◀ Delivery Teams.
 - b. MOD organizations providing ► **infrastructure and / or** ◀ services (eg Defence Infrastructure Organisation, Defence Equipment & Support, ► **Defence Digital** ◀, 90SU Third Line Spt).
 - c. Civilian organizations providing infrastructure ► **and / or** ◀ services (eg BT, ► **NATS** ◀).
3. Where the ► ◀ DTL issues a formal agreement, the ► ◀ DTL **should** coordinate the agreement creation (eg timeliness, responsibilities and coherence) and ensure that Safety and budgetary responsibilities are clearly identified.
4. Agreements **should** be periodically reviewed. The periodicity **should** be laid down in the agreement.

Guidance Material 3140(1)

Interfaces

5. Nil.

¹ Examples of interfaces are organizational relationships, reliance on the provision of a service outside the project boundaries (eg power, NATS radar feed), Safety Case (SC) relationships.

**Regulation
3140(2)**

Justification of Air Traffic Management Equipment Safety Case Assumptions

3140(2) The ► ◀ DTL **shall** ensure that ATM Equipment SCs provide evidence that the assumptions made regarding ► **infrastructure and / or** ◀ services provided external to the project and interfaces at the project boundaries are justified.

**Acceptable
Means of
Compliance
3140(2)**

Justification of Air Traffic Management Equipment Safety Case Assumptions

6. All assumptions in ATM Equipment SCs regarding interfaces and the provision of ► **infrastructure and / or** ◀ services (inside and outside the project scope) **should** be supported by evidence that the interface / ► **infrastructure /** ◀ service will behave as expected. Examples of suitable evidence are:

- a. Formal agreements.
- b. Reference to other Safety Cases.
- c. Test results. ► ◀
- d. ► **Performance information.** ◀

**Guidance
Material
3140(2)**

Justification of Air Traffic Management Equipment Safety Case Assumptions

7. Nil.

**Regulation
3140(3)**

Front Line Command Formal Agreements

3140(3) Front Line Commands (FLCs) **shall** ensure that any ► **infrastructure and / or** ◀ service that they provide or receive, or activity that they conduct on behalf of another organization, which impacts ATM Equipment Safety, is formalized with a documented agreement. This regulation **shall** apply to all current and future activity.

**Acceptable
Means of
Compliance
3140(3)**

Front Line Command Formal Agreements

8. The formalized agreement **should** include:
 - a. What the service / activity is (eg auditing, providing engineering Subject Matter Expert advice).
 - b. Details of who, how and when the activity will be conducted.
 - c. Expiry or review dates for the agreement.
 - d. Any monitoring or performance requirements (eg Key Performance Indicators).
 - e. Processes for information dissemination across both FLCs / organizations, including reporting chains for audit findings and responsibilities for corrective action, if appropriate.

**Guidance
Material
3140(3)**

Front Line Command Formal Agreements

9. An example of a formalized agreement suitable for this purpose is a Service Level Agreement.
10. Examples of where a formalized agreement may be required are:
 - a. Where an Release To Service Authority is conducting the Release into Service Process for other FLCs.
 - b. Where an FLC is conducting Assurance activity within a different FLC.