MINISTRY OF DEFENCE
General Secretariat of Defence and National Armaments Directorate
Air Armaments Directorate

SUPPLEMENT "B" to TP AER.00-00-5 edition of 24 June 2011

"CONFIGURATION CONTROL. PREPARATION, ASSESSMENT AND AUTHORISATION PROCESSES FOR CHANGES TO MATERIEL UNDER G.D.A.A. RESPONSIBILITY."

Edition 10 April 2013

This Technical Directive is a SUPPLEMENT to TP AER(EP).00-00-5, edition of 24th June 2011, introducing the changes to the aforementioned TP indicated below

1. PURPOSE

This supplement serves to introduce, into the base standard issued on the 24th June 2011 and corresponding Supplement "A", the part concerning recognition of the System Design Responsible company, envisaging two distinct cases and introducing a new, additional C.T.D. form for the appointment of the SDR, Attachment 1A in Appendix 1.

2. VALIDITY

This supplement "B" to TP AER(EP).00-00-5 is applicable to all effects as from its date of approval.

3. INSTRUCTIONS

At page 7, paragraph 2.2, replace the first paragraph with the following:

The Designer Company of a Weapon System, Level 1 Configuration Item, normally holder of the Military Aircraft Type Qualification Certificate, must demonstrate to the A.A.D. that it is fit to be appointed SDR prior to the commissioning of the W.S. (of lev. 1 C.I.), by issuing a specific C.T.D., forms for which are provided in Appendix 1 (Attachment 1 and Attachment 1°).
In the first case the C.T.D must include any level 2 C.I. and the corresponding Designer Companies, which may be recognised as level 2 SDR, as per Attachment 1.

At page 7, paragraph 2.2, add the following to the end of the paragraph:

In the second case, the SDR, as owner of the design for the Level 1 C.I. (that being the military aircraft), has a Design Organization (DO) fit for the design, including all equipment, systems and/or installed component parts. This SDR is responsible for integration of the engine, identified by type (P/N), the design of which is responsibility of an engine manufacturing Company, identified as the Engine Design Company (EDC), and responsible for obtaining Certification from the competent Authority.

In this case the SDR is responsible for the fitness-for-installation and compliance with performance and airworthiness requirements of the engine in the scope of the aircraft design, making use of the documentation approved by the Authority competent for the corresponding Engine Design Company.
The SDR shall provide for the continued updating of the aircraft configuration including all equipment, systems and/or installed component parts.

The SDR assures maintenance of the configuration data necessary for compliance with all performance and airworthiness requirements of the engine, as well as its fitness for installation on the aircraft type, through issue of a Non-Armaereo Directive (NAD) for the engine, based on the technical configuration documents (Service Bulletins or equivalent) issued by the Engine Design Company, in cases where there is no impact on the performance and/or airworthiness of the aircraft and there are no Airworthiness Directives or similar directives issued by the corresponding competent Authority of the Engine Design Company.
Where there is impact, the SDR shall issue specific configuration documents (CTD) of its own, to supplement the NAD.

THE DIRECTOR
(Gen. Isp. Capo G.A ESPOSITO Ing. Domenico)

At page 1-5 of Appendix 1, insert the following form Attachment 1A.

Attachment 1A

COMPANY TECHNICAL DIRECTIVE
FOR APPOINTMENT OF S.D.R.
FOR AIRCRAFT TYPE ____

1. Company

2. N°_____ Date_____

   Rev_____ Date_____

   Em._____Date_____

3. Title of CTD

   APPLICATION / DECLARATION FOR APPOINTS OF S.D.R FOR THE AIRCRAFT TYPE _____

4. Aircraft

5. Description of CTD

   The Company _____ S.p.A. in (company address) _____, owner of the design, is in possession of a Design Organization (DO) for the design and development of the aircraft type, and is the System Design Responsible company for said aircraft, inclusive of all equipment, systems and/or installed component parts, as well as the engine Type _____ P/N _____, the Engine Design Company of which is the Company _____.

   The Company _____ S.p.A. in (company address) _____, is responsible for the fitness-for-installation and compliance with the performance and safety requirements of the engine _____ P/N ____ in the scope of the design of the Aircraft Type ____ making use of the documentation approved by the corresponding Authority of the Engine Design Company, and shall provide for the continued updating of the aircraft configuration including all equipment, systems and/or installed component parts.

   The Company _____ S.p.A. in (company address) _____, guarantees maintenance of the configuration data necessary for compliance with the performance and airworthiness requirements of the engine and its fitness-for-installation on aircraft type _____ through issue of Non-Armaereo Directives (NAD) for the engine _____ based on the technical configuration documents (Service Bulletins or equivalent) issued by the Engine Design Company of the engine, in cases where there is no impact on the performance and/or airworthiness of the aircraft and there are no Airworthiness Directives or similar directives issued by the corresponding competent Authority of the Engine Design Company.Where there is impact, the Company _____ in (company address) shall issue specific configuration documents (CTD) of its own, to supplement the NAD.

6. Agreement with Design Company doc.
   (to be attached)

7. Contacts

   TEL.:

   FAX.:

   E-MAIL:

8. Signature of Technical Director

MINISTRY OF DEFENCE
GENERAL DIRECTORATE OF AIR ARMAMENTS
Technical Coordination General Office
Office 3

CONFIGURATION CONTROL PROCESSES FOR THE PREPARATION, EVALUATION AND APPROVAL OF AMENDMENTS TO MATERIAL UNDER G.D.A.A. RESPONSIBILITY

NOTE

This edition of the Technical Publication supersedes the T.P. of the same number issued 16/03/2010
and supplement “A” thereto issued 01/04/2010.

Base Edition 24 June 2011

LIST OF VALID PAGES

ATTENTION: This standard is valid only if composed of the pages listed below, duly updated. Copy of the standard can be obtained upon request via e-mail to the following address: spt@dgaa.it.

The issue dates of the original and amended pages are::

Original…….. 0……..dated 24/06/2011

This standard consists of 88 pages as specified below:

Page N°	**Amendment N°**
Frontispiece……..	0
A……	0
I-IV……	0
1- 31……..	0
App. 1 (1-1 thru 1-34)..	0
App. 2 (2-1 thru 2-17)..	0

CONTENTS

LIST OF ATTACHMENTS APPENDIX 1

LIST OF ATTACHMENTS APPENDIX 2

1. INTRODUCTION

1.1 Overview

Configuration Control is carried out on Configuration Items (C.I.) throughout their life cycle to permit full and continued visibility and maintenance of their functional, physical and performance characteristics.

All activities that contribute to maintaining the performance and airworthiness characteristics of the C.I. are verified and implemented through Configuration Control.

This Standard defines the procedures for Configuration Control on the C.I. under the responsibility of the General Directorate of Air Armaments (G.D.A.A.) to be conducted after freezing the base configuration accepted by the D.A.

These activities are managed through the Company Applicable Technical Directives issued by the G.D.A.A. as instruments to render applicable the Company Technical Directives, Department Modification Proposals, Operative Technical Directives and Directives approved by State Bodies other than the G.D.A.A..

The standard is made up of four parts and two appendices, as specified below:

- Part 1 - Company Technical Directives (C.T.D.)
- Part 2 - Department Modification Proposals (D.M.P.) and Operative Technical Directives (O.T.D)
- Part 3 - Company Authorised Technical Directives, Company Operative Technical Directives issued by this G.D. (C.A.T.D. and C.O.T.D.)
- Part 4 - Non-Armaereo Directives (N.A.D.)

Appendix 1 is subdivided into three Annexes as follows:

- Annex I – Company Technical Directives;
- Annex II Department Modification Proposals, Company Operative Technical Directives;
- Annex III – Authorised Technical Directives and Operative Technical Directives;

Appendix 2 contains guidelines that can be adapted to the requirements of the individual A.F or S.B. concerned, and is subdivided into two Annexes:

- Annex I Instructions for compiling C.T.Ds (logistics/administration part)
- Annex II C.A.T.D. Compliance Control and Registration.

In the case of Weapons Systems developed, produced and commissioned under contracts stipulated by International Agencies (NATO, Bilateral Italian/NATO Member Agencies, or between Italy and other Countries), other configuration control procedures, formats, documentation and instructions

may be used in place of this Technical Publication, provided they are equivalent in terms of the technical information contained.
In such cases, specific Technical Publications (T.P.s) are issued by the Competent Divisions (C.D.) recognising such procedures upon approval by the Technical Coordination General Office (TCGO), which is responsible for preparing standards of a general nature for issue by the G.D.A.A. itself.
Special exceptions may be authorised through specific dispensations.

1.2 Scope

This Standard:

- defines the procedure for issue and delivery of Company Technical Directives (C.T.D.) by the System Design Responsible Companies (SDR) (aircraft, engine or other specific subsystems);
- defines the procedure for issue and delivery of Department Modification Proposals (D.M.P.) by maintenance Divisions and other A.F. and State Body users, and delivery of the O.T.D by A.F. High Commands that apply technical-operative Certification and Qualification (D.P.R. 556 dated 25th October 1999 – Art. 13 – 1.b);
- defines the procedure for rendering Company Technical Directives (C.T.D) and Department Modification Proposals (D.M.P.) applicable through issue of C.A.T.D., and O.T.D. through issue of C.O.T.D.;
- defines the applicability of Non-Armaereo Directives (N.A.D.) for Configuration Items under G.D.A.A. responsibility authorised for introduction by recognised Weapon System Design Organization Authorities (SDAR) or Agencies other than the G.D.A.A..

1.3 Correlated documentation

- AER.Q-2010 Definition of Initials, Terms, Phrases used in T.Ps issued by the GDAA
- AER.P-2 Military Aircraft Type Qualification, Fit-for-Installation Certification.
- AER(EP).P-6 Instructions for compiling technical specifications for military aircraft
- AER(EP).P-7 Standards on registration and maintenance of Military Aircraft Registers (M.A.R.)
- AER(EP).P-9 A.F. Operative Certification and Qualification.
- AER(EP).P-10 Design Organization Military Approval.
- AER.00-00-6 Identification and Registration of Aeronautical Configuration Items - Guidelines For A.Fs and S.Bs.
- AER(EP).00-01-6 Instructions for Compilation , Delivery and Management of Occurrence Reports on Aeronautical Materiel
- AER(EP).0-0-2 Definition and Regulation of the General Directorate of Air Armaments (ARMAEREO) Technical Publications System
- AER.0-0-8A Technical Publication Standards - Preparation, Issue and Delivery of "Publication Occurrence Reports " (T.P.O.R.) on Armaereo Aeronautical Technical Publications
- AER.P-107 Preparation of Hazardous Materials Management Manual "-60"
- AE(EP).P-104 Presentation, issue methods and update procedure for Cat. 3 T.Ps (Technical Manuals) accepted by the G.D.A.A.
- CL/UCERT Ed. December 2009 Standards for the Certification, Authorisation for Operative Use and management of aeronautical means and materiel subject to modification or integration at A.F. structures.

1.4 Applicability

The requirements of the Configuration Control process established in this standard apply to the production and operative phases of all Configuration Items for aircraft registered in the G.D.A.A. Military Aircraft Register.

The standard also applies to any specific Aircraft Ground Equipment (A.G.E.) C.I. with impact on the airworthiness of the Weapon System (Type 1 A.G.E.).For the applications authorised by this standard, note that according to the current standards on “Telefax Communications Validity”, fax communications are considered fully valid and may substitute physical delivery to become the only means for distributing documentation.

Furthermore and likewise, where digital signature is implemented, Certified E-Mail may substitute fax transmission of documents, in accordance with the technical rules established by Ministerial Decree dated 2nd November 2005 (O.J. n° 266 dated 15-11-05) which completes the regulatory framework defined by D.P.R. 68 dated 11th February 2005.

1.5 Validity

This T.P. supersedes AER(EP).00-00-5 dated 16/03/2010 and supplement "A" to that standard dated 01/04/2010, and shall come into effect as of its approval date.

1.6 Definitions

For the purposes of this standard, the acronyms, terms and expressions given in T.P. AER.Q-2010 shall be considered valid, in addition to the following specific definitions:

1.5.1 Aircraft Ground Equipment (A.G.E.)

Defined as the set of equipment for carrying out flight preparation and maintenance operations on a given Weapon System. A.G.E. have specific performance requirements defined in the corresponding procurement contracts.

There are three categories of A.G.E. configuration items (C.I.):

- A.G.E. C.I. specific to type 1 Weapon Systems: the performance and safety of the aircraft depend on the element/s introduced by these AGE C.I., hence type one A.G.E. C.I. have direct impact on the airworthiness of the Weapon System.

  The list of these C.I. must be prepared and sent by the Weapon System Design Responsible Company to the Competent Division no later than the entry into service of the first series-produced weapon system.

  This list is then transposed into the technical standards of this G.D. through issue of specific AER-series Applicable Technical Directives by the Competent Division, in collaboration with the TCGO;

- A.G.E. C.I. specific to type 2 Weapon Systems: aircraft safety and performance do not depend on the A.G.E. C.I. since performance is assured by precise procurement and calibration standards;

- Non-specific A.G.E. C.I.: commercial material with performance requirements guaranteed at purchase (example: testers, benches, etc).

1.5.2 Configuration Item (C.I.)

Defined as an item identified by a code in technical documentation that describes the physical and functional characteristics of a product.

There are various levels of C.I. in relation to the complete structure of the higher level final system described in design specifications.

The first level (Lev. 1) always consists of the highest level final system (for example, the aircraft as a whole).

The second level (Lev. 2) systems depending on the first are items which, for their functional significance in terms of performance and safety, require specific Configuration Control management procedures (engines, complex systems, GFE, etc).

Levels are attributed according to the use and not the nature of the C.I..

Hence, the same C.I. may be level 1 if used as final system, and level 2 if used in a higher level system, (if used for jumps, a parachute is level 1, whereas when part of the aircraft equipment, it is level 2).

Each C.I. has a Designer Company, i.e., the organisation that has all knowledge and intellectual property of the design, having either developed it or acquired the necessary licenses.

Exceptions include C.I.s produced according to unified standards (UNI, MIL, DEF-STAN, STANAG, etc.): in these cases design responsibility lies with the Company that conducted the technical assessments for their adoption.

1.5.3 Acceptance

Acceptance is defined as consent to a given proposal. However, in the administrative procedure, when consent is given by a public body it does not imply the exercise of any control or verification since the public body may be limited to simply *"acknowledging the content of the document produced by the "proposing" subject"* and formalising it to permit the conduction of the corresponding procedure.

1.5.4 Approval

Approval is defined as the provision by which the Public Administration renders previously completed documents effective and executable.

The approval phase normally requires control of the legitimacy and content of the document subject to approval.

This control derives from the supervisory position of the approving body or in any case from the specific institutional responsibilities attributed to the body by the law.

1.5.5 Designer Company and System Design Responsible Company

The Designer Company is the Company that has all responsibility and knowledge of the design of the individual C.I., having either developed it or having received it on license from the original designer.

In the case of modifications to this material, the above Company is responsible for the design of the modifications it makes and the instructions given in the corresponding documents.

Designer Companies of Level 1 and 2 C.I. are appointed as System Design Responsible Companies through issue of specific Applicable Technical Directives.

The SDR plays a fundamental role in the Configuration Control process, being responsible for the design, modifications and instructions given in the corresponding documents it issues.
The tasks and responsibilities of the SDR are defined in this T.P..
Designer Companies of lower level C.I. must be specified in the configuration documents (Design Standards or similar) issued by the SDR.

1.5.6 System Design Authority Responsible (SDAR)

The System Design Authority Responsible (SDAR) is the Government Authority from which the D.A. may procure a C.I designed and built by a Designer Company.
The System Design Authority Responsible (SDAR) is responsible for initial Airworthiness based on the development and integration of the design and information given in the documents issued by the Designer Company, and responds to the D.A. with respect to the continued and continuing Airworthiness of the system, if necessary through the Designer Company.
The System Design Authority Responsible (SDAR) is appointed through issue of Applicable Technical Directives.

2. PART 1 - COMPANY TECHNICAL DIRECTIVES (C.T.D.)

2.1 Overview

Company Technical Directives (C.T.D.) are technical documents issued by the System Design Responsible Company, after the base configuration has been frozen, to introduce a technical modification, or for the conduction of tests and controls, or to provide instructions on configuration items.

In this case the System Design Responsible Company proposing the C.T.D. (signed by its Technical Director or his deputy) assumes full responsibility for the technical and engineering content of the documents.

2.2 Recognition of the SDR

Prior to the entry in service of the W.S., the Design Company of a Level 1 Weapon System C.I., which is usually holder of the Military System Type Qualification Certificate, must declare itself to the G.D.A.A. as fit for appointment as SDR through issue of a specific C.T.D., the form for which is given in appendix 1 (Attachment 1).

This C.T.D. must include any Level 2 C.I. and the corresponding Designer Companies to recognise as Level 2 SDR.

The Level 1 C.I. Designer Company may be recognised as SDR if it meets the following requirements:

- it has access to and full knowledge of all design data on the aircraft and its C.I.s. Responsibility for the design data is expressed through signature of the documents submitted to the G.D.A.A. by the Technical Director of the SDR;
- it has the technical capability to design modifications to the system for which it is SDR and to assure assessment of the impact of modifications on Level 2 C.I.s;
- it has a design organisation with the following elements: a Technical Director, an engineering department, an airworthiness department responsible for compliance of design with applicable requirements (only for Aircraft SDR), and an office responsible for configuration control management.

  The documentation inherent to performance and safety aspects is submitted to the G.D.A.A. with the signature of the Technical Director and Airworthiness manager (only for Aircraft SDR);
- it has knowledge of the G.D.A.A. Qualification, Registration and Configuration Control standards (AER(EP).P-2, AER(EP).P-7, AER(EP).00-00-5 and AER(EP).00-01-6);

- it has knowledge and access (in the case of Companies with license to the design of a C.I.) to all or part of the design and the capacity to design the necessary modifications.

  The licensing design company must have formally acknowledged that the licensee Company is capable of assuming responsibility for the design.

  In the case of partially or fully licensed Companies, the C.T.D. requesting appointment must indicate the part or totality of the C.I. design it is licensed to design.

On the basis of the above C.T.D. submitted by the Level 1 Designer Company, through which it assumes responsibility for ascertaining possession and maintenance of the above requirements (including those of any Company proposed as Level 2 SDR), the G.D.A.A. will recognise the Level 1 SDR through a specific Applicable Technical Directive, which, according to any particular configuration control requirements, will include the appointment of the necessary Level 2 SDRs.

2.3 Responsibilities of the SDR

The SDR's responsibilities include:

- formalising the list of C.I. to be monitored through logbooks/worksheets according to degree of C.I. maintenance and type and intervals, through issue of a specific C.T.D. no later that the aircraft commissioning date;
- formalising the list of special Level 1 AGE through issue of a specific C.T.D. no later than the aircraft commissioning date;
- identifying the Weapon System hazardous materials;
- issuing a C.T.D with a list of alternative materials and updating said list as new technology comes available;
- providing instructions for managing hazards to persons and property, on the ground and in flight, deriving from use of hazardous materials, including disposal instructions for replaced or reject parts in accordance with Std. AER.P-107, through issue of Manual (-60).

2.4 Scope of Company Technical Directives (C.T.D.)

The System Design Responsible company (SDR) is required to prepare C.T.Ds to correct faults or make improvements of any kind, in particular with respect to:

- safety, both on the ground and in flight;
- configuration identification;
- loading, CoG, inertia moment data;
- interchangability, maintainability, reliability, vulnerability, operating time;
- usage characteristics beyond pre-existing tolerances;

- compatibility with other items the C.I. is coupled with, or with pre-existing support, test or training means, or any other GFE materiel;
- safe management of hazardous materials deriving from processes or present in the C.I. subject to modification or replacement;

The SDR is also required to prepare any C.T.D. requested by the G.D.A.A. or User Divisions.

The SDR may submit a C.T.D on its own initiative for any of the following reasons:

- to prolong the life of the configuration item concerned;
- to increase safety;
- to make modifications considered useful for the user Divisions;
- to make modifications useful for the crew, overflown third parties, maintenance personnel (see Leg. Dec. 81/08).

NOTE

As established by Std. AER(EP).P-104, C.T.D. may not be used for modifications to manuals and Technical Publications, for which the SDR in any case remains responsible in accordance with Stds. AER(EP).0-0-2 and AER.0-0-8A.

C.T.D. must be registered in a specific register kept by the SDR available for inspection by the G.D.A.A. at any time.

In most other cases, issue of a C.T.D. is not required, for example for:

- technical changes involving changes to in-house C.I. production and/or test processes, or substitution of materials normally used with other equivalents;
- minor technical changes to improve C.I. without change of P/N;

The SDR is in any case responsible for making any and all updates to applicable Technical Publication available, in accordance with T.P.s AER(EP).0-0-2 and AER(EP).P-104, and the changes to the corresponding procurement contracts.

- The SDR is required to apply the changes and updates to the Technical Publications requested by the G.D.A.A. (Direct Change).

2.5 Company Technical Directive (C.T.D.) Classification

2.5.1 Technical Relevance Code

C.T.D.s are classified according to whether or not the modifications involve changes to an approved configuration or have significant impact on the C.I. performance and safety characteristics.

The classification, identified by the codes Δ(A), Δ(B), Ø(A), Ø(B), is explained in the following table:

	A: Modifications that impact performance and/or airworthiness.	B: Modifications that do not impact performance and/or airworthiness:
Modifications with configuration delta (Δ): introduction of new C.I.	Category Δ (A)	Category Δ(B)
Modifications without configurations delta (Ø): on C.I. that already belong to the approved configuration.	Category Ø(A)	Category Ø(B)

In general terms, a CTD may be:

- type ΔA: when the new C.I.s require verification of their own compliance with requirements and their impact on the qualified configuration basis.
- type ΔB: when the new C.I.s require verification of the own compliance with requirements and demonstration that they have no impact on the qualified configuration basis in terms of performance and airworthiness.
- a CTD is type ØA when it involves modifications to existing C.I. (with or without change of original P/N), to add new functions that require qualification or in any case verification of their impact on the qualified configuration basis.
- a CTD is type ØB when it involves modifications to existing C.I (with or without change of original P/N) without adding new functions, and therefore has no impact on the qualified configuration basis.

2.5.2 C.T.D. justification code

C.T.D. are also classified according to a justification code – “S” or “N” – indicating the nature and urgency of the C.T.D.:

- code “S” – SAFETY – if the purpose of the C.T.D. is to eliminate a fault in the C.I. whether on the ground or in flight. This code must always be used for C.T.D. concerning hazardous materials or applications and processes that may require use of hazardous materials (see manual -60 for identification of hazardous materials and instructions for their use) which consequently require updating;
- code “N” – NORMAL – if the purpose of the C.T.D. is to eliminate a fault not related to safety, and therefore only as an improvement to the characteristics or operative efficiency of the C.I., or to introduce new capacities.

2.5.3 C.T.D. priority code

Lastly, C.T.D.s are characterised by a priority code that identifies the urgency of the required technical intervention, identified based on the criteria set forth in the table below:

1 Immediate	Modification to introduce before next use of the C.I. concerned.	(to be used only for C.T.D. with justification code “S”.)
2 Urgent	To introduce in limited time period (e.g.: 10 days following issue of the C.T.D., or a corresponding number of flight hours or cycles)	(to be used only for C.T.D. with justification code “S”.):
3 Normal	To introduce within a given term, normally not limited	

2.6 Interim Company Technical Directives (I.C.T.D.)

In particular cases of need or urgency following the insurgence of a fault with immediate impact on the safety and/or efficiency of a C.I., the SDR is required to issued an I.C.T.D. to notify a directive with immediate, preliminary, precautionary and not definitive application, to prevent damage to persons or property and/or repetition of the problems encountered.

Given their purpose of responding to a condition of immediate urgency, I.C.T.D.s are not definitive and, as implied by their title, will have “interim” validity.

Hence an I.C.T.D must always be followed by a “Normal Action” C.T.D. that confirms its validity, or modifies the initially adopted provisions on the basis of subsequent and more detailed analyses and technical assessments.

Given their intrinsically ‘urgent’ nature, I.C.T.D.s are classified as set forth in the following paragraphs.

2.6.1 “Immediate” I.C.T.D.

These refer to corrective/precautionary actions requiring immediate application on C.I. in service, use of which could lead to an immediate danger.

These actions must be carried out on the C.I. before its next use.

2.6.2 “Urgent” I.C.T.D.

These refer to corrective/precautionary actions on C.I. in service, further use of which could lead to hazardous conditions. These actions must be applied within the limited time period specified in the I.C.T.D. itself, to guarantee continued system safety.

2.6.3 “Operative” I.C.T.D.

These refer to precautionary/corrective actions not directly inherent to hazardous conditions that must be applied within a short period of time to C.I.

destined in operations zones, in order to prevent or reduce operative limitations to the equipment itself.

As opposed to the other two cases, the time limits within which an “Operative” I.C.T.D. must be introduced may vary according to the operative urgency that caused it.

2.7 C.T.D. preparation

2.7.1 Preparation by the System Design Responsible company

The System Design Responsible companies are the only companies authorised to submit C.T.D./I.C.T.D.s for acceptance by the Competent Divisions of the G.D.A.A..

The Company must ascertain receipt by the C.D.

Designer Companies of lower level C.I.s may only submit modifications to the G.D.A.A. through the Design company responsible for the corresponding system (Level 1 and 2 C.I.).

2.7.2 Associated modifications competence of a single SDR

Technical modifications to an item (principal modification) may require concurrent modifications to other items for reasons to do with compatibility, coupling and interchangeability.In these cases, and when the items concerned are subject to configuration control by a single SDR, the company itself must submit the principal C.T.D and the associated C.T.D.s to the G.D.A.A..If the principal C.T.D and the associated ones are issued by a Level 2 SDR, in addition to being submitted to the G.D.A.A., they must also be submitted to the Level 1 SDR on which the C.I. for modification depend, indicating the absence or otherwise of impact on the safety and performance of the Level 1 C.I..

If there is impact, the higher level final System Design Responsible company will assess the technical elements to determine the need (or otherwise) for supplementary tests and updates to the applicable documentation.

Consequently, it will issue the corresponding C.T.D. with explicit reference to the C.T.D. issued by the Level 2 SDR.

2.7.3 Associated technical modifications competence or more than one SDR

In cases where a technical modification to a configuration item that is responsibility of a given SDR requires modifications to configuration items of another SDR, the former will coordinate its activities with the latter, such that all Technical Modifications are issued at the same time and each one makes explicit and detailed reference to the others.If the modifications concern Level 2 SDR, in addition to being submitted to the G.D.A.A., they must be sent to the Level 1 SDR with indications of the impact on the safety and performance of the latter.

If there is impact, the final SDR will assess the technical elements to determine the need (or otherwise) for supplementary tests and updates to the applicable documentation.
Consequently, it will issue the corresponding C.T.D. with explicit reference to the C.T.D. issued by the Level 2 SDR.

2.7.4 Assessment of applicability of modifications to Aircraft in Operative Configuration

The SDR is required to verify the compatibility of modifications to make to C.I.s to which a C.O.T.D (Company Operative Technical Directive) has been applied).
In specific terms, it must determine whether the modification contained in the C.T.D. may interfere with the technical modification introduced by the C.O.T.D.
The C.T.D. must therefore specify whether there is no impact on the Operative configuration or whether a dedicated C.T.D must be issued.

2.7.5 C.T.D. non-recurrent costs

The conversion of a C.T.D. into a C.A.T.D by the G.D.A.A. is limited to the sole technical aspects. In any case, the SDR must previously submit the logistics/economic part to the Armed Force / State Body concerned, including the non-recurrent costs of the C.T.D with code “N”. For the applicability of the CTD (boxes 21 and 22) the SDR must include the wording: “to be defined by the A.F. after logistics/economic assessment”.

2.7.6 Constraints associated with conversion of C.T.D. into C.A.T.D.

It must be noted that with the conversion of the CTD into CATD the Armed Force / State Body in effect contracts an exclusive commercial constraint for the procurement of the corresponding modification kit from the SDR company, unless otherwise envisaged by the C.A.T.D..
Indeed, with the approval of the modification it has developed, the SDR becomes responsible for the technical and engineering aspects of the CTD for the entire serviceable life of the C.I. in question.
However, implementation of a kit not supplied by the SDR would render the Weapon System O.S.C. (Outside Standard Configuration) due to the use of P/N not authorised in the C.A.T.D. itself.
Therefore, the implementation of modification kits purchased from third party companies, provided these supply the same kit to the SDR for implementation of the approved C.A.T.D. would release the SDR from the above responsibility.

2.8 C.T.D. delivery procedure

C.T.D. and I.C.T.D. must be sent to the G.D.A.A. (Competent Division) in the manner and using the methods described in this paragraph, and according to the priority assigned to them.

2.8.1 Immediate, Urgent and Operative C.T.D. / I.C.T.D.

C.T.D.s with priority code 1 “immediate” and priority 2 “Urgent” must be sent via fax and anticipated via telephone.
Faxes, complied according to the scheme given in Appendix I – Attachment 3, must indicate the number of the C.T.D. and reach the G.D.A.A. within the following times:

priority 1	within 24 hours of the event
priority 2	within 5 days of the event

“Immediate” and “Urgent” I.C.T.D. will have the same times and methods as the above priority 1 and priority 2 C.T.D.s.
“Operative” I.C.T.D.s will have the same times and methods as priority 2 “Urgent” C.T.D.s.
The I.C.T.D. and corresponding C.T.D. must have the same identification number.
The Company is responsible for assuring correct and complete reception of the fax communication, which must be confirmed by the receiver and registered with name, date and time.
The decisions concerning C.T.D./I.C.T.D. will be made by the G.D.A.A. in the times specified below, as from the date of receipt:

C.T.D./I.C.T.D.	priority 1 “Immediate”	within 24 hours
C.T.D./I.C.T.D.	priority 2 “Urgent”	within 3 working days
I.C.T.D.	priority 2 “Operative”	According to operative requirements

2.8.2 Normal C.T.D.

Priority 3 “Normal” C.T.D.s may be sent by normal means. C.T.D. with priority 2 and code “S” must be preceded by I.C.T.D..
The decisions concerning a Normal C.T.D. will be made according to need based on the code assigned.

3. PART 2 - DEPARTMENT MODIFICATION PROPOSALS (D.M.P.) AND OPERATIVE TECHNICAL DIRECTIVES

3.1 D.M.P.

The Department Modification Proposal (D.M.P.) is a document issued by Divisions of the A.F.s or State Bodies using the configuration items of this G.D. to propose technical modifications to improve or solve problems encountered during use of the C.I.s.

The D.M.P. must be signed by the Director of the Maintenance Department or the Head of Division designated, for each flight line, by the A.F. or S.B., with adequate technical experience.

3.2 "Interim" D.M.P. (I.D.M.P.)

To propose precautionary measures to prevent possible occurrences inherent to the safety or operative efficiency of equipment under G.D.A.A responsibility, "Interim" proposals may be made by the Technical Divisions of the A.F./S.B.

Three types of I.D.M.P. may be defined, based on the criteria indicated below.

3.2.1 "Immediate" I D.M.P.

This DMP is used for any proposed precautionary action requiring immediate application to C.I. which, if used after issue of I.D.M.P could give rise to an immediate hazard. The necessary measures must be applied to the configuration item before its next use.

3.2.2 "Urgent" I.D.M.P.

This refers to any proposed precautionary action on C.I which, if used could give rise to a potential hazard.

The necessary measures must be applied within the term stated in the I.D.M.P. itself

3.2.3 "Operative" I.D.M.P

This must be issued whenever the proposed precautionary action, which does not give rise to any potential hazard, must be applied within a short period of time to equipment involved in operations in order to prevent or limit any potential degradation to the performance of the equipment.

As opposed to the previous priority levels, the time limits within which these actions must be taken may vary according to effective operative urgency.

3.3 Issue and distribution of D.M.P.

3.3.1 D.M.P.

D.M.P.s, issued in the format shown in Attachment 4, Appendix I, must be sent by normal means to the Competent Division by the Central A.F. or S.B Offices, accompanied by an opinion on their validity/urgency given by the person or office that formulated them.

The G.D.A.A. may either assess D.M.P.s itself, and may issue the corresponding C.A.T.D., or transfer the D.M.P. to the Company concerned and the district L.T.S.O, assigning a term for the Company to formulate its technical opinion of the proposed modifications.

According to case, based on this latter opinion the G.D.A.A. may either issue a C.A.T.D. or request that the Company study, develop and propose a C.T.D. that meets the requirements of the proposed modification.

If the D.M.P. is issued by the Experimental Flight Centre (EFC), the centre may make all the updates to the applicable publications available as well, as per Std. AER(EP).P-104.

3.3.2 "Interim" D.M.P.

I.D.M.P.s must be sent via fax to the Competent Division, and for information to its Central Office.

"Immediate" I.D.M.P.s must be received within 24 hours of the event, and if not issued by a higher level A.F. or S.B. Maintenance Division, the A.F. or S.B. Central Office must notify its opinion to the C.D. within the following 24 hours via telegram.

Against this opinion, the C.D. will issue the corresponding I.C.A.T.D., or make decisions to that regard within the following 24 hours.

"Urgent" I.D.M.P must be received within 5 days of the event and if not issued by a higher level A.F. or S.B. Maintenance Division, the A.F. or S.B. Central Office must notify its opinion to the C.D. within the following 48 hours via telegram.

Against this opinion, the C.D. will issued the corresponding I.C.A.T.D. or make decisions to that regard within the following 24 hours.

"Operative" I.D.M.P may be received according to operative needs and if not issued by a higher level A.F. or S.B. Maintenance Division, the A.F. or S.B. Central Office must notify its opinion to the C.D. compatibly with operative said needs via telegram.

Against this opinion, the C.D. will issued the corresponding I.C.A.T.D. or make decisions to that regard compatibly with operative requirements.

3.4 Operative Technical Directives

After coordinating the plan of activities with the G.D.A.A. and on completing the Certification process, A.F.s implementing Armed Forces Technical

Operative Certification and Qualification pursuant to D.P.R. 556 dated 25th October 1999 (Art. 13 – 1.b) must deliver all pertinent documentation, including the Final Technical Report, Operative Technical Directive and the documentation issued by the High Commands (e.g. ”Certification for operative use” and the “Authorisation for operative use”).

On the basis of the above documentation, the G.D.A.A. may issue the corresponding Applicable Operative Technical Directive (A.O.T.D.), making the modification applicable to the C.I. involved, thereby giving them an Approved Operative Configuration.

If the G.D.A.A. does not recognise the documentation received, the A.F. may in any case proceed with Operative Technical Certification and communicate the Military S/N of the aircraft subject to the modification, in accordance with Std. AER(EP).P-9, with the annotation ‘Outside Standard Configuration (O.S.C.) in the Military Aircraft Register (M.A.R.).

4. PART 3 – COMPANY APPLICABLE TECHNICAL DIRECTIVES (C.A.T.D.) AND COMPANY OPERATIVE TECHNICAL DIRECTIVES (C.O.T.D.)

4.1 Overview

Applicable Technical Directives (C.A.T.D.) issued by the G.D.A.A. as National Authority responsible for certifying the airworthiness of Military and State Aircraft, represent the instrument for accepting any technical modification that changes a configuration applicable to all C.I. of aircraft registered in the Military Aircraft Register.

First and foremost, the G.D.A.A. identifies the Level 1 SDR trough issue of a specific C.A.T.D. against the CTD issued by the Company as described in preceding paragraph 2.2.

Along with the other divisions involved, the division competent (C.D.) for the level 1 C.I.s then coordinates and determines the recognition of the level 2 C.I. through a specific C.A.T.D.

In the case of special operative requirements that require the A.F. to apply DPR 556 and Operative Technical Certification, provided it accepts the documentation issued by High Commands, the G.D.A.A. may proceed to issue a specific Applicable Operative Technical Directive (C.A.T.D.) against the Operative Technical Directive issued by the A.F., in order to render the modification applicable to the Military S/Ns involved, which will thus have an Armaereo Approved Operative Configuration.

4.2 Preparation of Company Applicable Technical Directives and “Interim” Company Applicable Technical Directives (C.A.T.D./I. C.A.T.D.)

Applicable Technical Directives may be of two types:

- Company Applicable Technical Directives (C.A.T.D.);
- Interim Company Applicable Technical Directives (I.C.A.T.D.);

The C.A.T.D. is issued to implement a definitive modification on a C.I., complete in all technical and temporal aspects.

The I.C.A.T.D. is issued to implement a precautionary measure inherent to safety, which could consists simply of a “one-off” or periodic inspection, in lieu of a definitive corrective action (C.A.T.D.).

Following an occurrence in equipment potentially linked with safety, the first precautionary measures can be implemented through issue of an I C.A.T.D..

Subsequently, based on the results of the related studies and after considering all the implications of the problem, as required by Std. AER(EP).00-01-6, the necessary corrective actions may be defined through issue of a C.A.T.D. or an appropriate update to the Technical Publication in accordance with Std. AER(EP).P-104.

This can be issued against a C.T.D., D.M.P. or the Technical Report issued by the investigators directly.

The initial "one-off" provision may originate from an I.C.T.D., an I.D.M.P or may be defined directly by the C.D of the G.D.A.A. on the basis of the technical documentation received (usually in the form of an O.R.).

In coordination with the T.C.G.O. 3rd Office, the Competent Divisions assess the effect of the modification in the C.T.D. on the performance, safety and airworthiness of the aircraft in order to determine whether the category of the modification in the C.T.D. is correct according to the criteria set forth in preceding paragraph 2.5 (0A, 0B, ΔA and ΔB).

Specifically, before acceptance, C.T.D. for categories 0A, ΔA and ΔB must be submitted to the T.C.G.O. - 3rd Office for Qualification (means of compliance with applicable requirements).

On completion of the Qualification process, the T.C.G.O. - 3rd Office notifies positive outcome by approving issue of a C.A.T.D.

C.T.D. for category 0B modifications are processed directly by the competent Division, which autonomously approves conversion into C.A.T.D.

By issuing the C.A.T.D., the G.D.A.A accepts modifications based on the design and means of compliance with applicable requirements guaranteed by the SDR that issued the corresponding C.T.D., the latter having conducted all activities necessary for assuring the required safety and performance levels.

4.3 Preparation of C.A.T.D. with D.O.M.A. privileges

If the SDR is in possession of D.O.M.A. (Design Organization Military Approval) – as per AER(EP).P-10, the G.D.A.A. will accept the modification category defined by the SDR without further verification.

Declarations of compliance with applicable requirements will also be accepted for category 0A modifications.

In this case, approval for the subsequent phases of the modification process is issued directly by the SDR instead of by the T.C.G.O. – 3rd Office.

According to the privileges granted under D.O.M.A., the G.D.A.A may also, at its sole discretion, accept declarations of compliance with applicable requirements for a category ΔA or ΔB C.T.D.

4.4 Exceptions

Exceptions to the requirements of the C.A.T.D. (C.I., method, time, level of execution or other) may only be granted through issue of a subsequent

C.A.T.D. (amendment or supplement), based on the C.T.D. with the exceptions to the original C.T.D..

4.5 C.A.T.D. Priority

C.A.T.D.s may be given the following priorities:

- "Immediate" C.A.T.D./I.C.A.T.D.: for CTD with impact on safety and implementation before next use of the C.I.;
- "Urgent" C.A.T.D./I.C.A.T.D.: for CTD with impact on safety to be implemented within a short period of time;
- "Operative" I.C.A.T.D.: for CTD with impact of specific operative missions to be implemented according to the operative requirements of the mission;
- "Normal" C.A.T.D.: all C.A.T.D. not included in the above categories.

4.5.1 "Immediate" C.A.T.D./I.C.A.T.D.

On a mandatory basis, any serious occurrence likely to have immediate impact on the safety of the crew, overflown third parties, aircraft, C.I. or installations requires issue, within 24 hours of receiving the C.T.D./I.C.T.D. issued following the occurrence, of a C.A.T.D./I.C.A.T.D. with "immediate" priority.

The C.A.T.D. will take immediate effect upon receipt by the addressee, and must be implemented immediately.

The aircraft and/or materiel covered by the C.A.T.D. must be immediately suspended from service until the problem that led to the C.T.D. is eliminated as required.

4.5.2 "Urgent" C.A.T.D./I.C.A.T.D.

These C.A.T.D. require suspension from service and/or flight of the equipment covered if the C.A.T.D. has not been implemented within the period of time indicated in the C.A.T.D. itself.

"Urgent" C.A.T.D./I.C.A.T.D.s must be issued within 3 days of receiving the corresponding C.T.D./I.C.T.D.

Urgent C.A.T.D.s have a maximum time limit for application no greater than ten calendar days or 10 hours of operation.

4.5.3 "Operative" I.C.A.T.D.

This category of I.C.A.T.D. refers to precautionary/corrective actions not directly related to hazard conditions but nevertheless requiring application within the short term to C.I. destined in operations zones, to improve the probability of mission success.

The application times may vary according to the urgency of the mission the actions make possible.

4.5.4 **“Normal” C.A.T.D./I.C.A.T.D.**

This type of C.A.T.D. includes all CTDs not included in the previous categories and may concern requests for checks, inspections, precautionary or other measures.

Normal C.A.T.D. may be introduced, within the foreseen time limit, with the financing of each user working with the C.I. concerned.

4.6 C.O.T.D. preparation

Certification and technical-operative qualification pursuant to DPR 556 is established through A.F. technical structures to meet particular or special operative requirements.

The above certification may only be applied to C.I.s already purchased by the A.F. or for their integration into primary weapon systems, and is not applicable to C.I.s currently being procured.

Upon initiating the certification process, the A.F. notifies the G.D.A.A. of its operative requirements and provides preliminary information demonstrating the applicability of DPR 556, and then requests that the G.D.A.A. “approve” the test program.

On completion of the Operative Certification process, with positive result, the A.F. prepares the final documentation that must contain all means of evidence and results emerging from the development phase to permit issue of Certification and the necessary Operative Technical Directives (O.T.D.) and Operative Technical Supplements (OTS) in accordance with the specific procedures of the A.F., and sends it all to the G.D.A.A. T.C.G.O. – 3rd Office and to the Competent Division (C.D.).

Based on the above documentation, the T.C.G.O. – 3rd Office notifies positive assessment by issuing approval to the C.D. such that the C.D. can issue a Company Operative Technical Directive (C.O.T.D) against the Operative Technical Directive (O.T.D.) issued by the A.F.

The C.O.T.D. thus becomes part of the approved C.I. configuration with the new wording “Operative Configuration” (C.A.T.D.+ C.O.T.D.) to distinguish it from the ordinary configuration (with just C.A.T.D.).

The SDR is kept apprised and must consider the above directives for the overall airworthiness of the aircraft when it issues new CTDs even for aircraft on which the C.O.T.D. has been implemented.

If the A.F. subsequently decides to render the modification final, the C.O.T.D. can be converted directly into C.A.T.D. or the SDR may conduct supplementary integration tests to convert it to C.A.T.D.

In case of urgent operative requirements, and if the Armaereo Director General considers it indispensable, it is possible to issue “Temporary Operative Technical Instructions” (T.O.T.I) prepared in accordance with Std. AER(EP).P-104, to provide instructions for the safe use of a given C.I. for a limited period of time.

TOTIs are used mainly to anticipate issue of aircraft technical manual supplements and issue of Ministerial FrontPages for the technical manuals of the C.I.s..

4.7 C.A.T.D. and C.O.T.D. issue and distribution

Without logistics details, C.A.T.D. only contain technical aspects and therefore must be sent with the source C.T.D. (Part 2, see appendix II) containing an area price for the cost details and the schedule of the logistics aspects that the individual user A.F.s and S.B.s are responsible for assessing.

The C.O.T.D.s will include the certification validity limitations and will be sent along with the Certificates issued by the A.F. High Commands.

4.7.1 Normal C.A.T.D. transmission

Normal C.A.T.D.s are sent by the C.D., along with part 2 of the source CTD, exclusively to the following Bodies, which are responsible for assessing the above technical aspects and distributing them to the personnel and collateral structures concerned:

- Navy General Command – 6th Air. Div;
- Carabinieri General Command – Air Service;
- Guardia di Finanza Air Service General Command ;
- AVES Div. Army Logistics Command;
- Air Force Logistics Command;
- Air Squad Command
- Home Office – Public Safety Dept. –Technical/Logistics Services and Patrimony Management Cent. Dir.;
- Home Office – Fire Brigade Dept. – Emergency and Technical Rescue Cent. Dir. – Special Rescue – Air Rescue;
- Coast Guard General Command – 4th Div. – Aircraft Office;
- Ministry of Agriculture, Forestry and Food – State Forestry Commission – Service I – Division IV
- Local Technical Services Offices (LTSO);
- Company that issued the CTD;
- WSDOC if different to Company that issued the CTD.

4.7.2 Immediate or urgent C.A.T.D. transmission

Immediate or urgent C.A.T.D./I.C.A.T.D. inherent to flight safety must be sent via fax along with part 2 of the source CTD (if present) to the following Bodies, which must confirm receipt.

The following Bodies are responsible for distributing the C.A.T.D./I.C.A.T.D. to the competent peripheral offices working on the Weapon Systems concerned.

These Bodies must notify any changes or updates to the following data.

BODY	TELEPHONE	FAX
Flight Safety Inspectorate	06 49865607	06 49866857
Navy General Staff – 6th Div. Aircraft Technical Office.	06 36805469	06 36803249
Carabinieri General Command – S.M. Dept., Air and Sea Service	06 80982131	06 80982228
Army General Command Transport and Materiel Department	06 47358705	06 47358945
Situations Room – Air Force Logistics Command	06 49866535	06 49866804
Guardia di Finanza General Command IV Dept. Air Office	06 44223715	06 442237106
Home Office – Public Safety Dept. –Technical /Logistics and Patrimony Man. Cent. Dir.	06 78469926	06 78469933
Home Office – Fire Brigade Dept. –Emergency and Rescue - Special Rescue – Air Rescue;	06 71289529	06 71280086
Coast Guard General Command – 4th Div, Aircraft Office	06 59084343	06 59648219
Ministry of Agriculture Forestry and Food – State Forestry Commissions – Service I – Division IV	06 88314311	06 88314311
LTSO MILAN	02 73904430	02 73904471
LTSO TURIN	011 5678116	011 9963208
LTSO NAPLES	081 7055120	081 0172888
Company that issued the CTD;		
SDR of higher level final W.S.		

4.7.3 **Immediate or urgent C.O.T.D. transmission**

The C.O.T.D. is sent by the C.D. to the SDR, the A.F. Technical Office delegated with certification and to the General Command concerned.

The Technical Office delegated with A.F. certification then distributes it to the departments concerned.

4.8 Compliance with C.A.T.D. / I.C.A.T.D.

C.A.T.D./I.C.A.T.D. are applicable within the time periods established in them. The Technical Officer in charge of the maintenance structure itself is responsible for assuring that any equipment on which the C.A.T.D. has not been applied is suspended from service. Responsibility for controlling compliance with the given time limits lies with the following Bodies:

a) this G.D. and the LTSOs involved, for C.I. under industrial production and maintenance contracts with this G.D.;
b) the A.F./State Body and pertaining Services Depts., for C.I.s in service with the A.F / State Body and industry, in the latter case for works under contracts with the A.F. / State Body.

4.9 Operative Certification

If the G.D.A.A. does not approve the documentation received and has not issued the C.O.T.D., the Military S/Ns of the aircraft subject to the modification will result as Outside the Standard Configuration (O.S.C.) approved by Armaereo, in accordance with T.P. AER(EP).P-9.

Therefore the High Commands that authorised use will assess whether the C.A.T.D./I.C.A.T.D. issued during the Operative Certification period are compatible with the aircraft O.S.C., and will be responsible for their application or otherwise to those aircraft.

4.10 Modification to Stocks

The A.F.s have the faculty to decide not to modify all stocks if in excess of requirements or destined for alienation.

Stocks must be modified within the time limits established in the C.A.T.D. but must be planned such as to assure availability of stocks in pre and post modification configuration.

In either case, the non-modified stocks may not be used after expiry of the time limit established in the C.A.T.D. and must be segregated, labelled and registered on the available EDP systems.

4.11 C.A.T.D. and I.C.A.T.D. state of compliance control

The compliance status of each C.A.T.D./I.C.A.T.D. to the items concerned must be continually monitored by the user A.F.s and State Bodies, which are directly responsible for assuring introduction of modifications within the established time limits.

For C.A.T.D./I.C.A.T.D. concerning safety in particular, control of implementation times is essential due to the impossibility of using pre-modification C.I.s beyond the established time limit.
Responsibility for detailing the procedures for the maintenance Divisions lies with each A.F. / State Body.

4.12 C.A.T.D. Cancellation, Suspension, Supplement.

4.12.1 C.A.T.D. and C.O.T.D. cancellation

Any C.A.T.D. that in the opinion of this G.D.A.A. is no longer considered applicable must be cancelled through issue of a formal “Deed of Cancellation”.
A C.O.T.D. may be cancelled once the operative requirement has ceased and the related Operative Technical Certification expired, and the C.O.T.D. has been uninstalled from the C.I. concerned.

At any time an amendment/revision to a CTD is issued because the requirements are no longer technically and/or conveniently applicable to the corresponding configuration item, the original CTD must be cancelled and a replacement C.A.T.D. issued, which will be identified by a new number and new edition date.
The substitute C.A.T.D. will indicate whether or not it is necessary to re-modify the items previously modified under the C.A.T.D. the substitute replaces.
According to the case, one of the following notes will always be included at the start of the text, before frame 1:

“This C.A.T.D. supersedes C.A.T.D. n° ……. Ed. ……
This C.A.T.D requires additional works to the C.I.s to which the above A.T.D. has already been applied”.

or:

“This C.A.T.D. supersedes C.A.T.D. n° ……. Ed. ……
The C.A.T.D requires no additional works to the C.I.s to which the above A.T.D. has already been applied”.

At any time a modification to an OTD is issued that requires substantial changes to the C.O.T.D., the original C.O.T.D. must be cancelled and a replacement C.O.T.D issued, which will be identified by a new number and edition date, in addition to the following note:

“This C.O.T.D. supersedes C.O.T.D. n° …..... Ed. …….
This C.O.T.D. requires additional works to the C.I.s to which the above O.T.D has already been applied”.

or:

"This C.O.T.D. supersedes C.O.T.D. n° ..... Ed. ……
This C.O.T.D requires no additional works to the C.I.s to which the above O.T.D. has already been applied".

4.12.2 **C.A.T.D. suspension.**

If it should become necessary to suspend application of a C.A.T.D. already issued and currently being implemented but found to be unsatisfactory, a motivated communication must be sent by fax to the Competent Division of this G.D., which will then prepare a supplement to the base C.A.T.D..

4.12.3 **C.A.T.D. and C.O.T.D. supplement**

This G.D.A.A. has the faculty to issue supplements to CATDs already in effect in cases where the modifications / supplements / improvements / changes to execution times are of an entity that does not require issue of a new C.A.T.D. as described in paragraph 4.12.1..

Supplements are given the same number as the base CATD plus a letter (A, B, C, etc., corresponding to 1st, 2nd, 3rd supplement, etc.).

A supplement can be made to a COTD if it is necessary to extend the validity of the operative requirement.

Supplements are identified by that same number as the base COTD plus a letter (A, B, C, etc., corresponding to 1st, 2nd, 3rd supplement, etc.)

5. PART 4 – TECHNICAL DIRECTIVES ISSUED BY BODIES OTHER THAN THIS G.D. – NON-ARMAEREO DIRECTIVES (N.A.D.)

5.1 Overview

The wording “Non-Armaereo Directive” (N.A.D) generally indicates any technical directives issued by an Authority other than this G.D..

Non-Armaereo Directives may have the following sources:

- Directives issued by Authorities recognised by this G.D.A.A. and System Design Authority Responsible (SDAR).
- Directives issued by national or foreign Government Agencies, Commissions and International Groups (e.g. the ICAA PAs, USAF TCTOs, US Navy AMCs, etc.).
- Directives issued by national or foreign Companies (e.g. Engineering Change Proposals, Service Bulletins, etc.).

5.2 Applicability

No technical directives with origin other than Armaereo are automatically applicable to the C.I. under this G.D.A.A. Such directives (recognised by the absence of the identifying initials “AER”) may only be introduced is specifically authorised by the G.D.A.A..

In this sense, the automatic applicability of N.A.D.s may only be accepted following issue of an “umbrella” Applicable Technical Directive for certain types of aircraft (and/or C.I.s) containing specific precautions for assimilating them to C.A.T.D/I. C.A.T.D, such as:

- prior approval of the SDAR or national or foreign State Entity, Agency, commissions or international group ;
- distribution to the final higher level SDR and Divisions/Bodies involved with configuration maintenance.

In the case of international cooperation programs, the Competent Division in coordination with the TCGO will prepare procedures for aligning with the configuration control standards of the program, if necessary with partial exceptions to national standards.

5.3 Recognition of the System Design Authority Responsible (SDAR).

In the event the D.A. purchases a Level 1 C.I. from a Government Agency (E.g. US Army, Navair, etc…) or delegate, the authority is usually holder of

the Military Aircraft Type Qualification Certificate, and to be appointed System Design Authority Responsible (SDAR), it must submit a document to the G.D.A.A. with the following content:

- a declaration by which it assumes responsibility for airworthiness, with the necessary identification (Name, brief description of system and P/N) of the Level 1 C.I.;
- identification of the Office of the authority (name, address, etc.) responsible for the activities and corresponding contact point (name, telephone, e-mail);
- identification of the Level 1 C.I. Design Company (name and address);
- in case of proxy, include the references of the agency delegated for the activities and specify contents of the proxy.

5.3.1 Responsibilities of the System Design Authority Responsible (S.D.A.R.).

System Design Authority Responsible (S.D.A.R.) is responsible for Airworthiness based on the development and integration of the design and instructions contained in the corresponding documentation issued by the Company. It must indicate the list of special type 1 AGE subject to Configuration Control and the list of C.I.s requiring monitoring through log books in a specific document.

5.4 N.A.D. handling

The SDR that receives an N.A.D. must send it to the C.D. accompanied by its own technical assessment concerning its introduction.
For urgent modifications (see following paragraph 5.3.2.) the documentation must be sent via fax.
If the N.A.D. is issued by an authority recognised by the G.D.A.A. as SDAR, no technical opinion is required from the SDR.

5.4.1 N.A.D. similar to “normal” C.A.T.D.

In the case of an N.A.D. automatically rendered executive by an “umbrella” C.A.T.D., the C.D. must send that document to all the interested parties.
In the case of an N.A.D. not automatically applicable, the C.D. will request the A.F /S.B. to assess the directive to determine whether it is opportune or necessary to introduce the modification to C.I.s concerned.
Based on the AF/SB assessment, the CD will send the N:A:D to the final higher level system SDR for assessment, if different to the SDR that issued the N.A.D..
The above Company must then provide the C.D. with its technical opinion, signed by the Technical Director, within thirty days of receiving the request.
Based on this opinion and the results of its own assessments, the CD will decide:

- to issue a C.A.T.D. directly.
- to request that the SDR issue a specific C.T.D.;

5.4.2 N.A.D. similar to “immediate” or “urgent” C.A.T.D./I.C.A.T.D.

In the case of issue of an N.A.D. rendered automatically executive by an “umbrella” C.A.T.D., the CD must send it to the Bodies listed in paragraph 4.7.2.

On receiving an N.A.D. not automatically applicable, whatever its source, the CD, if possible, will convert it into an “immediate” or “urgent” action C.A.T.D or I.C.A.T.D..

In particularly urgent cases, the N.A.D. may be attached with the CATD or ICATD, rendering it directly applicable.

The C.D. send the CATD or ICATD to the same Bodies listed in preceding paragraph 4.7.2.

1. APPENDIX 1 – ANNEX I
COMPANY TECHNICAL DIRECTIVES

The phases involved in defining a C.T.D. may be distinguished as follows:

a) determination of the need or utility of the technical modification;
b) determination of the technical relevance, justification and priority of the technical modification (by the SDR);
c) preparation of the C.T.D. by the SDR;
d) submission of the C.T.D. to the G.D.A.A.;
e) examination of the C.T.D. by the G.D.A.A.,
f) conversion of the C.T.D. into an official document that renders it executive.

1.1 Company Technical Directives (C.T.D.)

C.T.D.s for appointment as SDR must be presented using the form in attachment 1.

C.T.D.s for technical modifications must be presented using the form in attachment 2.

This form comprises Part 1 of the C.T.D. and must contain details of all the technical requirements of the modification, for assessment by the G.D.A.A..

Part 2 of the C.T.D. for technical modifications, to be taken as a guideline, must include all information of an economic, operative and logistics nature to permit a full view of the potential impact and other aspects for assessment by the Users, and that may be modified according to their needs.

The C.T.D. Part 2 is detailed in Appendix 2 - Annex I.

1.2 Interim Company Technical Directives (I.C.T.D.)

I.C.T.D.s must be issued in abbreviated form and anticipated via fax in order to implement immediate precautionary measures to prevent any occurrence related to the safety or functionality of the C.I..

Formal C.T.D. are normally assigned priority code 3, even if issued to definitively eliminate faults with impact on safety, and thus with justification code “S”, provided they are preceded by specific I.C.T.D. or issued to eliminate a fault that could become manifest only after a certain calendar or operating time, in any case not short.

1.3 Compilation and delivery to the G.D.

The Company is required to compile the CTD form following the instructions given below.

For all C.T.D. with justification code “S” the word “SAFETY” must be placed at the top centre of the form FrontPage, regardless of their priority code.

In particular, for the above “Safety” CTD, an attachment must be prepared, referred to box 31 – “safety”, page 2 of the CTD form, that provides all safety-related information, including information on managing any hazardous materials.

For class 3 “S” (safety, normal action), the Company must indicate the term for introduction beyond which further use of the C.I. in pre-modified condition is forbidden.

All the elements necessary for issuing any subsequent C.A.T.D. must be attached with the C.T.D.

The originals of the C.T.D. must be sent to the G.D. (Competent Division) complete with the following documentation and information:

- technical description of the modification;
- updates to technical publications, or indication of when these will be available, making certain the delivery date is not later than the date of the first modification kit supplied or first modified item;
- technical elements supporting the need to proceed whether entirely, partially or not at all with supplementary tests to qualify or recognise the C.I as fit for installation (fit-for-installation tests may be conducted by the Company at its own establishments or at the maintenance divisions of the A.F. S.B concerned);
- reference to qualification and/or fit-for-installation documents, if necessary;
- assessment of CTD compatibility with modifications under A.F. Operative Certification managed with C.O.T.D..

To prevent delays to CTD issue, the Modified C.I. certification process may be completed in a phase after issue of the CTD.

However, the modification may <u>not</u> be accepted prior to certification of the configuration item.

1.4 C.T.D. amendment and revision

The following paragraphs give instructions on how to modify a CTD already issued, after giving due consideration to the following definitions:

- Modification or minor error corrections (amendment)

  Modification or minor error correction is understood as any change that has no economic and/or technical/logistic impact on the substance of the CTD or its means of introduction.

- Significant changes (revision)

  Significant changes are understood as any change that has economic and/or technical/logistic impact on the CTD or its means of introduction.

1.4.1 C.T.D. not yet converted to C.A.T.D.

If it is necessary to modify a CTD issued but not yet converted to CATD, the issuing Company must proceed as follows:

- Amendment

  The Company submits a new FrontPage (page 1, attachment 1) to the base CTD and the changed pages, or a summary of the corrections to be made.
  The new FrontPage will bear the same number and corresponding date of the base CTD in box 3.
  The same box will indicate “Amend. 1” for the first Amendment to the base CTD, “Amend. 2” for the second, and so on, with the corresponding dates.

- Revision

  The Company submits a new FrontPage (page 1, attachment 2) to the base CTD and the corrected pages.
  The new FrontPage will bear the same number and corresponding date of the base CTD in box 3, attachment 2.
  The same box will indicate “Rev. 1” for the first revision, “Rev 2” for the second and so on, with the corresponding dates.
  The back of the FrontPage must have the list of pages comprising the revised document and the pages themselves must indicate the revision reference to the bottom right.
  Each revised CTD will incorporate any previously issued amendments.

1.4.2 **C.T.D. already converted to C.A.T.D.**

If minor modifications are necessary to a CTD already converted into CATD, the Company may issue a specific amendment following the instructions given in preceding paragraph 1.4.1., motivating the reasons for the changes. This will be followed by a supplement to the CATD.

If significant changes have to be made to a CTD already converted to CATD, the Company will issue a specific revision, following the instructions given in the previous paragraph, and likewise motivating the reasons for the changes. This will be followed by a new CATD, which supersedes the previous version.

1.5 G.D.A.A. acceptance of modification proposals

The SDR that issues a CTD or and ICTD is fully responsible for the technical and engineering content of the proposed modification and the priority level and/or justification code assigned to the modification itself.

1.5.1 **C.T.D. introduction procedure**

Once a CTD part 1 has been accepted, the Competent Division for the principal modification will issue the corresponding CATD. The Competent Divisions for the configuration item subject to the associated modifications (where contemplated) will issue the corresponding CATDs within 15 days of issuing the principal CATD..

COMPANY TECHNICAL DIRECTIVE FOR APPOINTMENT AS AIRCRAFT SDR AND FOR THE LIST OF LEVEL 2 C.I. WITH PROPOSALS FOR THE RESPECTIVE LEVEL 2 SDRS (C.T.D.)

1. Company

2. N°_____ Date_____

   Rev_____ Date_____

   Am._____Date_____

3. C.T.D. Title

   Appointment of Aircraft SDR _____

   List of Level 2 C.I. with proposal for appointment of respective SDRs

4. Aircraft

5. Description of the CTD

   This CTD identifies the Company _____ as responsible for the Weapon System _____ and for the design, modifications and instructions given in the corresponding documents issued by the Company.

   Where necessary, it identifies the Level 2 Configuration Items for the above aircraft and proposes the SDR for each of them.

6. Lev. 1 SDR

7. Delegated SDR

8. Proxy doc.

9. Type of proxy

(attach doc.)

10. List of Level 2 C.I. with respective Level 2 SDR and applicability

11. SDR concordance doc.

(Attach doc.)

12. Delegated SDR.

13. Proxy doc

14. Type of proxy

(Attach doc.)

15. Contacts

    TEL.:

    FAX.:

    E-MAIL:

16. Signature of Technical Director

INSTRUCTIONS FOR COMPILING THE "COMPANY TECHNICAL DIRECTIVES" FORM

- Box 1: Enter the Name and Address of the Company submitting the CTD.
- Box 2: Enter the Number and Date of the base CTD and any Revisions or Amendments.
- Box 3: This box is precompiled, only enter the aircraft to which the information in the CTD refers.

  Delete the second paragraph if there are no Level 2 C.I..
- Box 4: Enter the type of aircraft concerned and the corresponding P/Ns.
- Box 5: This box is precompiled, enter the information only in the spaces left intentionally blank.
- Box 6: Enter the name and address of the SDR
- Box 7: Enter the name and address of any delegated SDR.
- Box 8: Enter the reference to the proxy document with which the proxy was granted. This document must always be attached with the CTD.
- Box 9: Enter whether the proxy is total or partial.

  In case of partial proxy, list the areas covered by the proxy.
- Box 10: List the Level 2 C.I. with respective P/Ns alongside the proposed Level 2 SDRs.

  If box 4 contains several P/Ns, state whether all the Level 2 C.I.s are present in the configuration represented by those P/NS.

  If there are no Level 2 C.I.s, the box must contain the wording:

"The aircraft has no Level 2 Configuration Items, therefore full responsibility for all items and/or parts lies with the Company _____".

- Box 11: List the concordance documents between the aircraft SDR and the Level 2 C.I. SDR on the activities the latter is responsible for. This document must always be attached with the CTD..
- Box 12: Enter the name and address of any delegated Level 2 SDR.
- Box 13: Enter the reference to the proxy document, which must always be attached with the CTD.
- Box 14: Enter whether the proxy is total or partial. If partial, list the areas covered by the proxy.
- Box 15: Enter the contacts of the Technical Director or his deputy authorised to sign the CTD.
- Box 16: Signature of Technical Director or his deputy authorised for such activities.

Attachment 2

SAFETY (1)
COMPANY TECHNICAL DIRECTIVE
(C.T.D.)

1. Company
2. Title of CTD.
3. N°_____ Date_____
   Rev_____ Date_____
   Am._____ Date_____
4. Technical relevance code
5. Justification code
6. Priority code
7. Aircraft
8. System
9. Other Systems involved
   ☐ YES ☐ NO
10. Place of execution
    Level 1: Level 2: Level 3: Company:
11. Specifications affected
12. Drawings affected
13. Higher level assembly name
14. Name of part
15. P/N of part
    a) Actual
    b) Modified
16. Description of the C.T.D.
17. Purpose
18. Execution time limit
19. Means of execution
20. This modification must be made before / with / after the following modification:

Application in production 21. from S/N or MSN Quantity involved

Application in retrofit 22. from S/N or MSN Quantity involved

23. Signature of the TECHNICAL DIRECTOR

(1) apply only to CTD with justification code "S"

PART 1

Contd. pag. 2 of CTD..... Impact on configuration dated.....proposed by.....
24. Other systems concerned
25. Other Companies/Bodies concerned
26. Parts concerned
27. Impact on specifications of part concerned
28. Impact on system characteristics and specifications
29. Impact on technical publications
30 Alternative solutions
31 Hazardous materials

X	32. ELEMENTS	Att.	X	ELEMENTS	Att.
a	IMPACT ON SPEC. CHARACT:		b	IMPACT ON OPERATIVE SERVICE	
	PERFORMANCE			SAFETY	
	WEIGHT/CENTRING/STAB. (Aircraft)			SURVIVAL	
	WEIGHT/MOMENT (Other equipment)			RELIABILITY	
	DRAWINGS			MAINTAINABILITY	
	NAME			LOF/LIC/LVC	
	QUALIF. AND/OR FIT-FOR-INST. PROG .			OPERATING PROCEDURES	
				ELECTROMAGNETIC INTERFERENCE	

INSTRUCTIONS FOR COMPILING THE "COMPANY TECHNICAL DIRECTIVES" FORM Part 1

CTD forms can be copied as required.
Where necessary, to provide sufficiently detailed information use extra sheets (with sketches, diagrams, etc.) referring to the boxes on the form.

Compilation of page 1: CTD FrontPage.

- Box 1: Enter the name and address of the Company submitting the CTD.
- Box 2: Enter the title of the CTD
- Box 3: Enter the number and date of the base CTD and any revisions and amendments.
- Box 4: Enter the Technical Relevance Code of the CTD modification (0A, 0B, □A and □B)□
- Box 5: Enter the applicable justification code.
- Box 6: The Company must indicate the priority code applicable to the CTD.
- Box 7: Enter the type or model of the aircraft concerned
- Box 8: Enter the name and type of system (engine, missile or specific equipment) to which the C.I. converted by the CTD belong (if the system consists of the aircraft, write "see Box 8").
- Box 9: Enter an "X" in the box to indicate whether modifications to other systems or parts are implied.
- Box 10: Indicate the time necessary to make the modification.
- Box 11: If the CTD impacts specifications and/or test standards, enter the number and the issuing Authority.
- Box 12: Indicate the number of the highest level drawing impacted.
  Other important drawings and all drawings directly referred to in the specifications of the C.I. covered by the CTD must be listed in an attachment referring to this box.
- Box 13: Indicate the name of the assembly that the part covered by the CTD belongs to.
- Box 14: Indicate the appropriate, complete or descriptive name of the part or parts covered by the CTD.
- Box 15: Indicate the P/N of the part entered in Box 16.
  Indicate the P/N referring to the items in pre-modified state in part a) of the box, and the P/N referring to the items in post-modified state in part b).

- Box 16: Give a sufficiently detailed description of the proposed modification, to permit prompt identification and assessment.
  The description must include both the modified part or parts and the type of modification.
  If the box is too small, use extra sheets to present sketches and drawings sufficient to give a clear representation of the proposed modification, reference specifications and all other technical documentation supporting the proposed modification.

- Box 17: Include details of the needs that gave rise to the CTD.
  If the CTD originates from the need to correct a technical problem, the problem, occurrence or dysfunction must be described in detail. This box must also include details of any O.R. and the situation of the cases presented.
  If changes in performance are foreseen, these must be indicated in quantitative terms.

- Box 18: Indicate when the technical modifications must be introduced.
  For normal action Safety CTDs, the terms for introduction must always be indicated (in operating hours, cycles and/or calendar time), after which any parts concerned that are still in pre-modified configuration must be suspended from service.

- Box 19: This box contains a detailed description of the operations necessary for introducing the technical modification,.

NOTE

This description will contain all elements necessary such that in the event of acceptance the G.D. can issue the C.A.T.D. without requesting any further information from the Company and without compiling other boxes on the form.
These elements must be listed in the sequence indiated in paragraph 1.4 of Annex III.

- Box 20: When modifications previously formalised in CATD must be introduced in a certain order, this order must be specified.
  Any incompatibility with modifications under Operative Certification managed through COTD must likewise be indicated.

- Box 21: Indicate the S/N or P/Ns of the equipment to which the modification must be applied in production.

- Box 22: Indicate the S/N or P/Ns of the equipment to which the modification must be applied in retrofit.

- Box 23: Signature of the Technical Director of the Proposing SDR

Compilation of page 2: PART 1- Impact on configuration.

This page must be compiled if the modification has impact on the specifications of the system or part concerned.

- Box 24: List every other system affected by the CTD, indicating name and number.
- Box 25: Identify the other Offices or Companies affected by the CTD
- Box 26: List all configuration items, training and support equipment affected by the CTD
- Box 27: Describe the impact of the modification on the specifications and characteristics of the part affected by the CTD, in quantitative terms.
  Indicate any incompatibility with modifications under Operative Certification managed through COTD.
- Box 28: Describe the impact of the modification on the specifications and characteristics of the system.
- Box 29: Indicate whether it is necessary to modify the technical publications
- Box 30: Indicate the various possible solutions and the motives that led to the choice of the solution proposed through the CTD.
- Box 31: Indicate the hazardous materials present in the modification and any other information on hazardous materials management, with respect to safe disposal of the replaced parts.
- Box 32: The impact on the characteristics of the part, its use, etc., must be described in attachment, which must be quoted in the specific column in the box.

  Attach any modifications to the text of contract specifications.

  If not exhaustively described on Page 1, the impact on drawings must be described in a specific attachment.

ATTENTION

Any attached drawings must be executed such as to permit good quality reproduction.

Under the item “qualification and/or fit-for-installation program”, indicate “yes” if qualification or fit-for-installation certification is required for the components involved.

If affirmative, the corresponding attachment must indicate the qualification and/or fit-for-installation certificate number or details of the request for such activities, sent to this G.D. with the corresponding programs and schedules.

If qualification and/or fit-for installation certification is not required for the modified C.I., the attachment must detail the corresponding reasons.

The item “safety” must indicate the modification safety assessment documentation and any other information related to management of hazardous materials, including instructions for safe disposal of any parts replaced or rejected.

Attachment 3

INTERIM COMPANY TECHNICAL DIRECTIVE

FROM: ……..

Prot.

NUMBER OF PAGES: .

TO: ....
....
....

INFO: ....
....
....

SUBJECT: INTERIM COMPANY TECHNICAL DIRECTIVE "……"

CONTRACT N°……

I.C.T.D. N° …… ACTION ……..……EDITION…….....

TITLE……../:/……

SOURCE……/:/……

1. Place of execution ……../:/……..

2. Execution time limit...../:/.....

3. Application……/:/……

4. Purpose……/:/……

5. Info on materials /:/……

6. Means of execution ……../:/……

7. Hazardous Materials

8. Supplementary information

9. Registration on documents … /:/……

THE TECHNICAL DIRECTOR

1. APPENDIX 1 - ANNEX II DEPARTMENT MODIFICATION PROPOSAL

1.1 D.M.P.

D.M.P. prepared according to the model (Attachment 4) must be sent to this G.D.A.A. by the Central Offices of the A.F. (or State Body) accompanied by assessment of their validity/urgency.

1.2 Immediate – Urgent – Operative "Interim" D.M.P.s

These proposals must be sent via fax with message similar to that in attachment 3 for I.D.M.P., directly to the C.D., for information to the Central Office and the SDR.

2. OPERATIVE TECHNICAL CERTIFICATION DOCUMENTATION

The A.F. will produce the final documentation resulting from the technical/operative qualification and certification process, applying the specific A.F. implementation procedures, and will send this documentation (typically the Final Technical Report, Operative Use Certificate, Authorisation for Operative Use and Operative Technical Directive (O.T.D.) to the G.D.A.A..

The O.T.D. in particular must indicate:

- the purpose of the modification;
- description of modification or installation kit;
- description of the material subject to modification in pre and post modification configuration;
- production processes for manufacturing the kits;
- workshop drawings of the various kit components;
- procedures for implementing the kit on the material to modify or on the principal weapon system;
- tests for functional verification of the modified material or installation kit and their integration in the principal weapon system.

SAFETY (1)

DEPARTMENT MODIFICATION PROPOSAL (D.M.P.)

1. Office/Department 2. Title of DMP 3. N°_____ Date_____

   Rev_____ Date_____

   Am._____ Date_____

4. Type of DMP 5. Justification code 6. Priority code

7. Aircraft 8. System

9. Other systems affected 10. Place of execution

   ☐ YES ☐ NO Level 1: Level 2: Level 3 : Company:

11. Specifications affected 12. Drawings affected

13. Name of higher level assembly

14. Name of part 15. P/N of part a) Actual

    b) Modified

16. Description of the DMP (if necessary use additional sheets)

17. Purpose (if necessary use additional sheets)

18. Application from S/N or MSN

19. Quantity affected

20. Signature of OFFICE/DEPARTMENT HEAD

21. E.C. Considerations/Recommendations (if necessary use additional sheets)

(1) apply only to DMP with justification code "S"

Contd. pag. 2 of DMP..... Impact on configuration dated.....proposed by.....
22. Other systems affected
23. Other Companies/Bodies affected
24. Parts affected
25. Impact on specifications of part affected
26. Impact on system characteristics and specifications
27. Impact on technical publications
28. Alternative solutions
29. Hazardous materials

X	30. ELEMENTS	Att.	X	ELEMENTS	Att.
a	IMPACT ON SPECIFICATION CHARACTERISTICS		b	IMPACT ON OPERATIVE SERVICE	
	PERFORMANCE			SAFETY	
	WEIGHT/CoG/STAB. (Aircraft)			SURVIVAL	
	WEIGHT/MOMENT (Other equipment)			RELIABILITY	
	DRAWINGS			MAINTAINABILITY	
	NAME			LOF/LIC/LVC	
	QUALIFIC. AND/OR FIT-FOR-INSTALLATION PROGRAM			OPERATING PROCEDURES	
				ELECTROMAGNETIC INTERFERENCE	

INSTRUCTIONS FOR PREPARING THE COMPANY TECHNICAL DIRECTIVES" FORM Part 1

DMP forms can be copied as required.
Where necessary, to provide sufficiently detailed information use extra sheets (with sketches, diagrams, etc.) referring to the boxes on the form.

Compilation of page 1: DMP FrontPage

- Box 1: Enter the name and address of the Office/Department presenting the DMP
- Box 2: Enter the title of the DMP
- Box 3: Enter the number and date of the base DMP and any amendments or revisions.
- Box 4: Entre the letter "F" (formal).
- Box 5: Enter the justification code applicable to the DMP (as for the CTD)
- Box 6: The Office/Department must indicate the priority code applicable to DMP (as for the CTD)
- Box 7: Enter the type or model of aircraft concerned
- Box 8: Enter the name or type of system (engine, missile or specific equipment) to which the C.I covered by the DMP belong (if the system consists of the aircraft, write "see box 7").
- Box 9: Enter an "X" in the box to indicate whether modifications to other systems or parts are implied.
- Box 10: Indicate the resources necessary for executing the modification.
- Box 11: If the DMP impacts specifications and/or test standards, enter the number and the issuing Authority.
- Box 12: Indicate the number of the highest level drawing impacted.
  Other important drawings and all drawings directly referred to in the specifications of the C.I. covered by the DMP must be listed in an attachment referring to this box.
- Box 13: Indicate the name of the assembly that the part covered by the DMP refers to.
- Box 14: Indicate the appropriate, complete or descriptive name of the part or parts covered by the DMP.
- Box 15: Indicate the P/N of the part quoted in box 15.
  Indicate the P/N referring to the items in pre-modified state in part a) of the box, and the P/N referring to the items in post-modified state in part b).

- Box 16: Give a sufficiently detailed description of the proposed modification, to permit prompt identification and assessment.
  The description must include both the modified part or parts and the type of modification.
  If the box is too small, use extra sheets to present sketches and drawings sufficient to give a clear representation of the proposed modification, reference specifications and all other technical documentation supporting the proposed modification.
- Box 17: Include details of the needs that gave rise to the D.M.P..
  If the D.M.P. originates from the need to correct a technical problem, the problem, occurrence or dysfunction must be described in detail. This box must also include details of any O.R. and the situation of the cases presented.
  If changes in performance are foreseen, these must be indicated in quantitative terms.
- Box 18: Indicate the S/N or P/N of the equipment to which the modification applies.
- Box 19: Indicate the necessary quantity
- Box 20: Signature of Office/Department Head
- Box 21: Considerations / Recommendations of the Central Office

Compilation of page 2: Impact on configuration.
This page must be compiled if the modification has impact on the specifications of the system or part concerned.

- Box 22: List every other system affected by the DMP, indicating name and number
- Box 23: Identify the other Offices or Companies affected by the D.M.P..
- Box 24: List all configuration items, training and support equipment affected by the D.M.P..
- Box 25: Describe the impact of the modification on the specifications and characteristics of the part affected by the DMP, in quantitative terms
- Box 26: Describe the impact of the modification on the specifications and characteristics of the system.
- Box 27: Indicate whether it is necessary to modify the technical publications
- Box 28: Indicate the various possible solutions and the motives that led to the choice of the solution proposed through the D.M.P..

- Box 29: Indicate the hazardous materials present in the modification and any other information on hazardous materials management, with respect to safe disposal of the replaced parts.

- Box 30: The impact on the characteristics of the part, its use, etc., must be described in attachment, which must be quoted in the specific column in the box..

Attach any modifications to the text of contract specifications.

If not exhaustively described on Page 1, the impact on drawings must be described in a specific attachment.

ATTENTION

Any attached drawings must be executed such as to permit good quality reproduction.

Under the item “qualification and/or fit-for-installation program”, indicate “yes” if qualification or fit-for-installation certification is required for the components involved.

If qualification and/or fit-for installation certification is not required for the modified C.I., the attachment must detail the corresponding reasons.

For DMP inherent to safety, attach all safety-related information.

The item “safety” must indicate the modification safety assessment documentation and any other information related to management of hazardous materials, including instructions for safe disposal of any parts replaced.

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1. APPENDIX 1 – ANNEX III COMPANY APPLICABLE TECHNICAL DIRECTIVES

The following paragraphs list the information necessary for compiling the Company Applicable Technical Directive (C.A.T.D.) appointing the SDR and SDAR, and for introducing modifications issued respectively as per the forms in Attachment N° 5 (SDR/SDAR appointment form in Italian), N° 6 (SDR/SDAR appointment form in English) and N° 7 given below.
These forms are available in electronic format via the Armaereo intranet.

1.1 SDR / SDAR appointment form title page (Italian Attachment 5, English Attachment 6)

a) Identification number and issue date

To the top right. The identification number is assigned according to the requirements of Std. AER(EP).0-0-2, and the date of the C.A.T.D. will correspond to its edition date.
Indicate whether it is a supplement with corresponding date.

b) Title

The title will include the following wording: "System Design Responsible company (SDR) / System Design Authority Responsible (SDAR) ***[name of system *]***
It is necessary to identify whether the appointment is of an SDR or an SDAR.

[System Design Responsible (SDR) / System Design Authority Responsible (SDAR) of the ***[name of the system*]***]

[name of the system] si intende il nome del sistema così come è/verrà riportato sul Certificato di Omologazione di Tipo Aeromobile Militare / Certificato di Omologazione / Certificato di Idoneità all'Installazione.

[name of the system]: is the name of the system as will be shown on the Military aircraft Type Qualification Certificate / System Qualification Certificate / Fit-For-Installation Certificate

c) Source

Indicate the details of the CTD or other correlated document.
The WARNING and the NOTE, if applicable, will be immediately under the Source on form N° 5 (SDR/SDAR appointment form in Italian) and N° 6 (SDR/SDAR appointment form in English).

1.2 Body of the C.A.T.D.

- Section 1 *[System]*

  Enter the name, P/N and a description of the system concerned.

  The system name must be as given on the Military Aircraft Type Qualification / System Qualification and Fit-for-Installation Certificate.

- Section 2 *[Scope]*

  Enter whether the appointment is of an SDR or an SDAR and the name of the system concerned as per section 1, following the instructions given in forms 5 and 6.

- Section 3 *[Regulation Reference]*

  Enter this T.P. in the version applicable at the time the C.A.T.D. is issued.

- Section 4 *[Identification of the SDR / SDAR]*

  Following the instructions given in forms N° 5 and N° 6, include the data and responsibilities of the Company appointed SDR, or the data and responsibilities of the Authority / Body appointed SDAR.

  In the case of delegated SDR, identify the type of proxy, the delegated Company and the delegated activities.

The above C.A.T.D. must be signed by the Armaereo Director General or his deputy.

Allegato 5

C.A.T.D. AER.1X-*[nome del sistema*]*-00-1XX

Edizione 0 del XX/YY/ZZZZ

MINISTERO DELLA DIFESA

DIREZIONE GENERALE DEGLI ARMAMENTI AERONAUTICI

TITOLO: Ditta Responsabile del Sistema (SDR) / System Design Authority Responsible (SDAR) del ***[nome del sistema*]***

Fonte: C.T.D. N° XXX datata XX/YY/ZZZZ o altro documento correlato datato XX/YY/ZZZZ emessa/o da ***[nome della Ditta/ nome dell'Autorità]***

AVVERTENZE

*La presente C.A.T.D. edita da Armaereo, viene emessa per rendere esecutiva la **[Fonte]** emessa da/dalla **[nome della Ditta / nome dell'Autorità]** che rimane pienamente responsabile delle informazioni contenute nel predetto documento.*

*NOTA **[Se Applicabile]***

La presente C.A.T.D. annulla e sostituisce la C.A.T.D. AER. Ed. gg/mm/aaaa.

1. SISTEMA

   [nome, P/N e descrizione del sistema*]

2. SCOPO

   La presente C.A.T.D. ha lo scopo di nominare formalmente la Ditta Responsabile del Sistema (SDR) / System Design Authority Responsible (SDAR) per il sistema ***[nome del sistema*]***

3. T.P. DI RIFERIMENTO

   AER(EP).00-00-5 Edizione ***[Enter l'edizione applicabile]***

4. INDIVIDUAZIONE DELLA SDR / ASDR

   La Ditta ***[nome della Ditta, sede legale, ecc..]*** / L'Autorità ***[nome dell'Autorità, indirizzo, ecc…]*** è individuata quale SDR / SDAR per il sistema ***[nome del sistema*]***, compresi tutti i suoi equipaggiamenti e/o parti componenti.

   Nel caso di SDR:
   La Ditta ***[nome della Ditta]*** è responsabile del progetto, delle modifiche e delle indicazioni contenute nei relativi documenti da essa emessi.

   Nel caso di SDAR:
   L'Autorità ***[nome dell'Autorità]*** è responsabile dell'Aeronavigabilità iniziale basata sullo sviluppo e l'integrazione del progetto e delle indicazioni contenute nei relativi documenti emessi dalla Ditta ***[nome della Ditta]***.

   In caso di SDR delegata/licenziataria aggiungere:
   Viene riconosciuta quale SDR Delegata/Licenziataria ***[identificare il tipo di delega]*** la ditta ***[nome della Ditta delegata]*** che potrà svolgere ***[identificare le attività delegate]***

IL DIRETTORE GENERALE

[nome del sistema]: si intende il nome del sistema così come è/verrà riportato sul Certificato di Omologazione di Tipo Aeromobile Militare / Certificato di Omologazione / Certificato di Idoneità all'Installazione.

Allegato 6
C.A.T.D. AER.1X-*[name of the system*]*-00-1XX
Edition 0 of XX/YY/ZZZZ

MINISTRY OF DEFENCE

GENERAL DIRECTORATE OF AIR ARMAMENTS

TITLE: System Design Responsible (SDR) / System Design Authority Responsible (SDAR) of the ***[name of the system*]***

Source: *CTD N° XXX dated XX/YY/ZZZ or other related document dated XX/YY/ZZZ issued by* ***[name of the Company / name of the Authority]***.

WARNING

This C.A.T.D. issued by Armaereo, gives full applicability to the ***[Source]*** *issued by* ***[name of the Company / name of the Authority],*** *that remains fully responsible for the technical information therein contained.*

NOTE ***[if applicable]***

*This C.A.T.D. supersedes the C.A.T.D. AER.1X-****[name of the system*]****-1XX dated XX/YY/ZZZZ.***

1. SYSTEM

   [name, P/N, description of the system*]

2. SCOPE

   To formally identify the System Design Responsible (SDR) / System Design Authority Responsible (SDAR) for the system ***[name of the system*]***.

3. REGULATION REFERENCE

   GDAA's Regulation AER(EP).00-00-5 Edition ***[insert the applicable edition]***

4. IDENTIFICATION OF THE SDR / SDAR

   The company ***[name of the Company, legal address, ecc.]*** / The Authority ***[name of the Authority, address, ecc.]*** is identified as SDR / SDAR for the system ***[name of the system*]***, including all its equipment and / or component parts.

   In case of SDR:
   The ***[name of the Company]*** is accountable for the design, its changes and all the technical information contained within the Company's documents.

   In case of SDAR:
   The ***[name of the Authority]*** is accountable for the Airworthiness based on the design of ***[name of the Company]*** developed/integrated design and all the technical information contained within the Company's documents.

   In case of SDR delegated/licensee add:
   The company ***[name of the Company delegated]*** is recognized as delegated/licensee SDR ***[identify the type of delegation]*** for the following tasks ***[identify the activities delegated]***

THE GENERAL DIRECTOR

****[name of the system]**: is the name of the system as will be shown on the Military aircraft Type Qualification Certificate / System Qualification Certificate / Fit-For-Installation Certificate*

1.3 Title page of C.A.T.D introducing technical modification (Form in Attachment 6).

a) To the top left, write: “IMMEDIATE ACTION”, “URGENT ACTION” or “NORMAL ACTION” for C.A.T.D. with impact on safety, which must be introduced before next use of the C.I. concerned or within 10 days/10 hours of operation.
Immediately below, to the left, for C.A.T.D. with impact on safety, include the wording “SAFETY”.

b) Identification number and issue date
To the top right. The identification number is assigned as per Std. AER.0-0-2, and the C.A.T.D. date will correspond to the edition date.
Indicate whether it is a Supplement, with the corresponding date.

c) Title
The title centre will include a brief description of the modification, the name of the C.I. to which it refers and the name and type of the final C.I. (aircraft, engine, missile, etc.).

d) The warning as in form 6 is given immediately below the title. The third warning, given below, is included when a C.A.T.D. introduces variants to the flight envelope, flight procedures, flight instrumentation or cockpit layout.

WARNING: This C.A.T.D. supersedes C.A.T.D. AER. Ed. dd/mm/yyyy.

The Authority responsible for Operative Technical Certification pursuant to DPR 556/99 shall implement this ATD after verifying its compatibility on aircraft subject to Operative Certification.

Commanders shall assure that all personnel authorised to operate the equipment covered by this Directive are informed of the content of this ATD (wording to include only if the modification introduces changes to flight envelope, flight procedures, flight instrumentation or cockpit layout)

1.4 Body of the C.A.T.D.

The C.A.T.D. must give specific instructions for each of the elements indicated below, which identify the parts comprising the C.A.T.D..

- Section 1 Place of execution

  Indicate the technical level that must implement the technical modification.

  Usually, this part only indicates the maintenance level that has to execute the instructions given in the C.A.T.D., unless additional specifications are required.

  In determining the maintenance level to which to entrust execution of the C.A.T.D., due consideration must be given to technical capacity in terms of both human resources and means.

- Section 2 Execution time limits

  In this section, indicate by what time the technical modification has to be implemented.

  For modifications inherent to safety, indicate the time limits for implementation (cycles and/or hours of operation and/or calendar days) after which the item in pre-modified configuration must be suspended from service.

  This limit must be defined giving due consideration to the instructions given in the corresponding C.T.D..

  Moreover, for all C.A.T.D., except those inherent to safety, it is necessary to indicate a term that permits introduction of the modification within a limited timeframe but without penalising users, whether in terms of line efficiency or maintenance workload.

- Section 3 Applicability

  Specifically indicate the type of item or equipment subject to modification.

  If the C.A.T.D. is not applicable to all examples of the item, or applies differently to the various types of the item, specify the MSN or S/N.

  If the C.A.T.D. is applicable in production as well, this section indicates at which point the technical modification is introduced on the configuration items in production.

  If application of the C.A.T.D. in question is subordinate to another technical modification, this circumstance should be indicated in this section in a note with the following wording: NOTE The operations required by this C.A.T.D. must be carried out with / before / after the works required by ATD _____.

- Section 4 Scope

  Indicate the reasons that made the technical modification necessary and the purpose the technical modification aims to achieve.

  The Organisation responsible for implementing the technical modification must be aware of the motives and purpose, therefore it is important that this part is clear and complete.

- Section 5 Information about the material

  This section should include information on the parts necessary for the technical modification, the parts removed, provisions for stocks, procedures for procuring the material and its identification.

  This section is usually subdivided into the following paragraphs:

  (5.1) Parts necessary for the technical modification

  This paragraph indicates the parts necessary for implementing the technical modification on each of the Items. (indicate P/N, Name and quantity)

  (5.2) Stocks involved

  This paragraph indicates the stores involved in the technical modification, identified by code or reference number.

  Indicate both the stocks of the part directly concerned with the modification, and the higher level assemblies of which the part to be modified is component or subassembly.

  (5.3) Changes to identification data

  This paragraph indicates the new identification data (Code Number, NATO stock number, Ref. number or P/N) for the modified items, the new parts used and the parts eliminated.
  (indicate Name, pre-modification P/N, post-modification P/N, Quantity).

  (5.4) Necessary equipment

  If necessary, this paragraph identifies the specific equipment necessary for introducing the technical modification, if not already available to the Organisation responsible for implementing the modification.

  Indicate the equipment necessary for modifying items in service and stock items, all identification data, the Organisation from which the equipment must be requested, destination of any pre-modification equipment.

  NOTE

  If the technical modification also involves modifications to existing equipment, this

circumstance must be mentioned even if an independent C.A.T.D. has been issued for the modification to the equipment.

- Section 6 Implementation procedure

  This section will contain a detailed description of the operations necessary for implementing the modification.

  These operations generally include removal, introduction of the modification, reinstallation and testing.

  The preliminary operations for accessing the part to modify and carrying out the effective modification, as well as the final reinstallation of the item in the higher level assembly and the necessary tests may be described briefly, but must include precise references to the applicable manuals.

  If the modification is implemented solely at the Company, the information required in this section may be omitted.

- Section 7 Special instructions for material classified as hazardous and/or disposal of waste/reject material

  This section must include all instructions for managing risks to persons or property, on the ground or in flight, deriving from use of hazardous materials, and for the disposal of replaced parts and materials for which content must be specified.

  The following information must be provided:

  7.1 Special instructions for hazardous materials

  7.2 Instructions for the disposal of waste/reject material

- Section 8 Supplementary information

  This section must include any supplementary information not covered in the previous sections. This may include the following information, if applicable:

  8.1 Need to conduct tests on the modified part:

  8.2 Need for bench or flight testing on the system involved;

  8.3 Changes to weight and CoG;

  8.4 References to regulations

- Section 9 Registrations on documents

  This section lists the forms on which the technical modification must be registered.

  Registration must be made on the characteristic document of the C.I. under modification, or in its absence, on the characteristic documents of the higher level system.

- Section 10 Signatures

  Stamp and signature of Director General.

Include the list of attachments (CTD part 2 and others) to the bottom left

1.5 Secrecy classification

If the C.A.T.D. contains classified information, the text of the various sub-paragraphs will be marked SS, S, RR, R according to whether the information is Top Secret, Secret, Highly Reserved or Reserved.

The classification of a page that contains information of various secrecy levels will be that of the highest level in that page, and the overall classification of the C.A.T.D. will be that of the highest level in the C.A.T.D..

The title of the C.A.T.D. should be chosen such that it is declassified with respect to the C.A.T.D. itself.

C.A.T.D. AER.

ACTION **Edition date**

MINISTRY OF DEFENCE

GENERAL DIRECTORATE OF AIR ARMAMENTS

____ DEPARTMENT ____ DIVISION

TITLE:

WARNING

This ATD originates from CTD n° ____ dated ____ / S.B. n° _____ dated _____/ NTO (No Technical Objection) issued by the Company _____, appointed SDR / delegate SDR / licensed SDR for the system covered by this Directive.

The Authority responsible for Operative Technical Certification pursuant to DPR 556/99 shall implement this ATD after verifying its compatibility on aircraft subject to Operative Certification.

Commanders shall assure that all personnel authorised to operate the equipment covered by this Directive are informed of the content of this ATD (wording to include only if the modification introduces changes to flight envelope, flight procedures, flight instrumentation or cockpit layout)

1. PLACE OF EXECUTION

2. EXECUTION TIME LIMITS

3. APPLICABILITY

4. SCOPE

5. INFORMATION ABOUT THE MATERIAL

   5.1 Parts necessary for the technical modification

   5.2 Stocks involved

   5.3 Changes to identification data

   5.5 Necessary equipment

6. IMPLEMENTATION PROCEDURE

7. SPECIAL INSTRUCTIONS FOR MATERIAL CLASSIFIED HAZARDOUS AND/OR DISPOSAL OF WASTE/REJECT MATERIAL

   7.1 Special instructions for hazardous materials

   7.2 Instructions for the disposal of waste/reject material

8. SUPPLEMENTARY INFORMATION

   8.1 Need to conduct tests on modified part

   8.2 Need for bench or flight testing on the system involved

   8.3 Changes to weight and CoG

   8.4 References to regulations

9. REGISTRATIONS OF DOCUMENTS

THE DIRECTOR GENERAL

1.6 Title page of C.O.T.D. introducing Operative Technical Modification (Form in Attachment 7)

a) Identification number and issue date

The identification number, to the top right, will be similar to the number for CATD according to AER(EP).0-0-2, with the difference that the initials will be “COTD” and not “AER-”.
The COTD date will be the same as the edition date, indicating whether it is a supplement, with the corresponding date.

b) Title

c) The title centre will include a brief description of the modification, the name of the C.I. to which it refers and the name and type of the final C.I. (aircraft, engine, missile, etc.).

d) The following warning is given immediately below the source:

WARNING: This C.O.T.D. issued by Armaereo renders executive Operative Technical Directive n°_____ dated _____, uissued by Armed Force _____. Authority responsible for Operative Technical Certification pursuant to DPR 556/9.
The above OTD forms integral part of the aforementioned document.

1.7 Body of the C.O.T.D.

The C.O.T.D. must give specific instructions for each of the elements indicated below, which identify the parts comprising the C.O.T.D.

- Section 1 Aircraft/System
  Specifically indicate the type of item or equipment to be modified.
- Section 2 Scope
  Indicate the purpose of the modification.
- Section 3 Applicability
  Indicate the aircraft and MS/N to which the modification applies.
- Section 4 Registrations on documents
  Indicate the forms on which the technical modification must be registered.
  Indicate any modifications to make to the T.P or references to the O.S. issued for Operative Certification.
- Section 5 Validity - Expiry
  Indicate the terms of the requirement.
- Section 6 Signatures
  Stamp and signature of Director General.

C.O.T.D.

Edition dated

MINISTRY OF DEFENCE
GENERAL DIRECTORATE OF AIR ARMAMENTS
____ *DEPARTMENT* ____ *DIVISION*

TITLE:

WARNING

This C.O.T.D. issued by Armaereo renders executive Operative Technical Directive n°_____ dated _____, issued by Armed Force _____. Authority responsible for Operative Technical Certification pursuant to DPR 556/9.

The above O.T.D. forms integral part of the aforementioned document.

1. AIRCRAFT/SYSTEM

2. SCOPE

3. APPLICABILITY

4. REGISTRATIONS ON DOCUMENTS

5. VALIDITY - EXPIRY

THE DIRECTOR GENERAL

Attachment 9

INTERIM COMPANY APPLICABLE TECHNICAL DIRECTIVE

MINISTRY OF DEFENCE
GENERAL DIRECTORATE OF AIR ARMAMENTS
____ *DEPARTMENT* ____ *DIVISION*
Tel. +39-06-xxxxxxxx Fax +39-06-xxxxxxx

PROT:
M_D GARM T3 / / - - /

Admin.	uo	Prog. n°.	date	classification

NUMBER OF PAGES: .....

TO: ....
....
....
INFO: ....
....

SUBJECT: INTERIM COMPANY APPLICABLE TECHNICAL DIRECTIVE
"……."

I.C.A.T.D. N° ..... ACTION …….. EDITION ……..

TITLE :
SOURCE :

WARNING

This ICATD originates from ICTD n° ____ dated ____ / S.B. n° _____ dated _____/ NTO (No Technical Objection) issued by the Company _____, appointed SDR / delegate SDR / licensed SDR for the system covered by this Directive

The Authority responsible for Operative Technical Certification pursuant to DPR 556/99 shall implement this ICATD after verifying its compatibility on aircraft subject to Operative Certification.

1. PLACE OF EXECUTION
2. EXECUTION TIME LIMITS
3. APPLICABILITY
4. SCOPE
5. INFORMATION ABOUT THE MATERIAL
6. IMPLEMENTATION PROCEDURE
7. SPECIAL INSTRUCTIONS FOR HAZARDOUS MATERIALS
8. SUPPLEMENTARY INFORMATION
9. REGISTRATIONS ON DOCUMENTS

THE DIRECTOR GENERAL

1. APPENDIX 2 - ANNEX I: COMPANY TECHNICAL DIRECTIVES – ECONOMICS/LOGISTICS PART

This chapter provides guidelines for compiling part 2 of the CTD (with information of an economic, operative and logistical nature).

Part 2 of the CTD must be sent with Part 1, according to the procedure established in appendix 1. The information given in the procedures can be adapted to the specific needs of the user organisations.

C.T.D. PART 2

Contd. pag. 3 of C.T.D..... Impact on Logistics dated.....proposed by.....		
33. KIT Delivery Program:		
34. C.T.D cost……. Cost to Comp☐ Cost to D.A.. ☐	35. Total cost including Collat. Modif. cost to Comp.☐ Cost to D.A. ☐	
Application in Production	36. from S/N or MSN	Quantity involved
	37. Changes to Delivery Terms	
Application in Retrofit ☐ Pro. ☐ Retro ☐ Stock Exh.	38. from S/N or MSN	Quantity involved
39. Impact on Use, Logistic Support, Training and Operative Efficiency		
40. Impact on Development Program		

X	41. ELEMENTS	Att.	X	ELEMENTS	
a	Impact on Logistic Support:			-Maintenance Training	
	-Logistic Support Program			-Maintenance Training Equip.	
	-Maintenance Criteria			-Personnel	
	-Maintenance Procedures			-Company Technical Assistance	
	-Provisional Support Program				
	-Replacement parts / Stocks		b	Other Considerations:	
	-Infrastructures			-Interface	
	-Support Equipment			-Other Crews involved	
	-Operative Training			-Physical constraint	
	-Operative Training Equip.			-Other Crew reworking	
				-Test Procedures	

42. Alternative Solutions	43. Retrofit recommendations, detailed description
44. Working hours for testing	45. Need for Company assistance
46. System downtime	
47. Effects of modification on previously accepted modifications	48. Acceptance Limit date for: - Production - Logistics Support

PART 2

Contd. pag. 4 of C.T.D.....dated.....issued by.....					
49. AREA PRICE					
FACTORS	NON-RECURRENT	RECURRENT			TOTAL
A – PRODUCTION		UNIT	QUANTITY	TOTAL	
Part					
Test equipment					
Special tools					
Waste					
Design					
Test proc. modif,					
New part. qualif.					
B – RETROFIT					
Design					
Prototype testing					
Modif. kit testing					
Retrofit kit					
Documents preparation.					
Special tools					
Company assistance					
Military personnel Costs					
Post-modif. tests					
Modification to G.F.E.					
Modif. G.F.W. Qualif.					
C – LOGISTIC SUPPORT					
Stock part reprocess.					
New stock part					
Retrofit kit for stock					
Operative Training					
Maintenance training.					
Publications Updates					
New publications					
Modif. pub. prep.					
Maintenance Labour					
D – OTHER					
TOTAL					

50. HOURLY RATES APPLIED

PART 2

Contd. pag. 5 of C.T.D.....dated.....issued by.....

SCHEDULING

Date of acceptance

SIGNIFICANT EVENT

▲ □ DELIVERY START □ DELIVERY END △

Number of months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
APPLICATION IN PRODUCTION																																				
RETROFIT.																																				
PUBLICATIONS																																				
REPLACEMENT PARTS																																				
EQUIPMENT																																				
MAINTENANCE EQUIPMENT																																				
TRAINING EQUIPMENT																																				
KIT DELIVERY																																				

INSTRUCTIONS FOR COMPILING "COMPANY TECHNICAL DIRECTIVE" FORM Part 2

Compilation of page 3: PART 2 – Impact on logistics.

- Box 33 Briefly indicate the delivery schedule for the kit or parts sets necessary for the modification, and the proposed procurement source.
- Box 34 Enter the overall cost for introducing the CTD, indicating whether the cost is sustained by Company or the D.A..
- Box 35 Enter the total cost of the C.T.D. including any associated C.T.D. associate, indicating whether the cost is sustained by the Company or the D.A..
  Leave the box blank if there are no associated CTDs.
- Box 36 Indicate the S/N or MSN of the equipment to which the modification is applied in production
- Box 37 Briefly indicate the impact of the modification on the equipment delivery terms.
- Box 38 Indicate the S/N or MSN of the equipment to which the modification is applied in retrofit.
- Box 39 Describe the impact of the modification on use, logistics support, training and system efficiency.
- Box 40 Describe the effect of the modification on the system development program.
- Box 41 Impact on logistics support, etc., must be described in attachments quoted in the corresponding columns of the box.
- Box 42 Specify whether there are any alternative solutions to the problem for which the CTD was issued, describing the advantages and disadvantages of the other solutions.
- Box 43 References to an attached dossier with detailed descriptions of the methods and times for the retrofit modification ,indicating procedures, tools, destination of replaced parts, etc..
- Box 44 Indicate the working hours necessary for carrying out the retrofit modification.
- Box 45 Indicate the need for Company personnel at the Department, if so specifying the number and type of specialisation.
- Box 46 Indicate the total estimated system downtime due to introduction of the modification.

- Box 47 Summarise the cumulative effects on performance, characteristics, etc. of the part due to the CTD and those previously formalised in the C.A.T.D...
  Also indicate the consequences of not introducing the C.T.D..
- Box 48 Indicate the limit date for formalising the C.A.T.D. for production of the modified part according to program, and for preparing the corresponding logistic support according to program.

Compilation of page 4: PART 2- Total estimated costs.
A copy of this page must be compiled for each CTD associated with the principal CTD.
The overall cost of the various associated CTD, including the principal CTD, must be indicated in Box 35.

- Box 49 For each applicable item, enter details of the estimated cost of introducing the CTD.
- Box 50 Indicate the Hourly Rates used in the estimate in Box 46.

Compilation of page 5: PART 2- Scheduling.

Use the symbols given in the diagram to illustrate the schedules for production, retrofit, delivery of modified equipment, delivery of kits, maintenance/ training equipment and publications.

APPENDIX 2 - ANNEX II
C.A.T.D. COMPLIANCE CONTROL AND REGISTRATION - GUIDELINES.

1. APPENDIX 2 - ANNEX II – GUIDELINES FOR C.A.T.D. COMPLIANCE CONTROL AND REGISTRATION

1.1 C.A.T.D./I.C.A.T.D. COMPLIANCE CONTROL ON C.I. WITH INDUSTRY

1.1.1 Immediate and urgent action C.A.T.D./I.C.A.T.D.

This type of C.A.T.D. apply to items with industry before they are delivered back to the A.F. / State Body.

If certain equipment has already been accepted by the LTSO but not yet delivered to the A.F. /State Body, the LTSO will request application of the CATD in question by the Company.

In the latter case, if the CATD concerns equipment supplied under contracts managed by Central Offices other than the G.D.A.A., the above actions must be implemented by those offices.

1.1.2 Operative I.C.A.T.D.

These C.A.T.D. are applied when the activities require no additional costs. If there are additional costs, instructions will be provided by the C.D. of this G.D. which will agree the procedure with the Central Office of the A.F. / S.B. concerned.

1.1.3 Normal C.A.T.D. concerning safety

The LTSO must request implementation of these C.A.T.D. even in cases of increased costs and/or delays to equipment delivery terms.

In cases of significant cost increase and significant delay to delivery, or if parts/modification kits are unavailable, the equipment may be delivered in pre-modified configuration only if authorised by this G.D..

If the contract for implementing the modification is managed by Central Offices other than the G.D.A.A., the request must be made by those Offices.

1.1.4 Normal C.A.T.D. not concerning safety

These C.A.T.D. apply when the item to modify is at a given stage of processing (under repair, overhaul, construction) that permits introduction of the modification without additional costs or delays to the delivery of the C.I.s in question, and when the parts or kits necessary are available.

In either case, the LTSO must notify the C.D. and the competent Central Office of any CATD with implementation deferred for any of the above reasons.

1.2 C.A.T.D./I.C.A.T.D. REGISTRATIONS ON DOCUMENTS (LOGBOOKS AND CHARACTERISTIC FORMS)

This section gives guidelines for managing issued C.A.T.D. and their implementation on the C.I. concerned. These procedures can be used as a tool for determining the configuration status of each aircraft.

On receiving a C.A.T.D. the technical Officer in charge of maintaining the equipment distributed to the A.F. / State Body and the manager designated by the Company, for equipment present at the Company itself, will register it on the specific forms for the equipment concerned, as indicated in section 8 of the CATD, according to the following instructions:

a) if the C.A.T.D. is only applicable to certain items of the equipment, identified by S/N or military S/N, registration is not necessary for the items the ATD does not apply to;

b) If the C.A.T.D. does not envisage registration constraints, it must be registered on a specific form for each item, including those at depot or stores.

c) If physical inspection the item indicates that the C.A.T.D. is not applicable, apply the symbol N.A. (not applicable) to the side of the C.A.T.D. registration, in the “completion date” column.

d) If physical inspection of the item reveals that the works required by the C.A.T.D. have already been done, apply PWC (Previously complied With) in the “completion date” column.

NOTE

It is important to comply with these instructions. In the event the equipment is transferred from one body to another, this note informs the receiving body that the applicability of the ATD to the specific item has already been examined and determined.

1.2.1 **Registration of the situation of the Kits required for aircraft and the corresponding C.I. (Form TO-2)**

When compiling the request for the kits and/or parts sets, the technical Officer in charge of maintenance (responsible for scheduling modifications) on items distributed to the A.D. / State Body and to the Company, for those being processed by the Company itself, will prepare form TO-2 (see attachment 1) used to represent the situation of incoming kits/parts necessary for implementing the C.A.T.D./C.O.T.D. according to the number of items requiring modification.

1.2.2 **Registration of modification implementation status (Form TO-2A)**

On receiving a C.A.T.D./I.C.A.T.D./C.O.T.D.. the technical Officer in charge of maintenance will compile form TO-2A (see attachment 2), for each C.A.T.D./I.C.A.T.D./C.O.T.D. received.

On this form the maintenance organisations of each A.F. / State Body must register the systemic MS/N or S/N of all the C.I.s on which the modification must be implemented, even if dispatched elsewhere.

The initial serial numbers situation must be kept constantly updated, by reporting the changes to the status of each configuration item MSN or S/N.

1.2.3 **Compilation and transmission of form TO-3**

The A.F. / S.B maintenance organisations implementing C.A.T.D. / I.C.A.T.D. / C.O.T.D. on the items concerned will provide their organisations with progressive status updates, by compiling and transmitting form TO-3 (att. 3).

Form TO-3 must be compiled and transmitted to certify compliance or previous compliance of the C.A.T.D. or, if ascertained, its non-applicability.

It must be compiled and transmitted in any case when registration of CATD compliance is required on characteristic forms, within 5 days of effective compliance.

Whenever a C.A.T.D. is implemented on an item by one of the A.F. / S.B. maintenance divisions, the specialist implementing the modification requests that his Technical Office compiles form TO-3 for subsequent transmission.

One form is valid for one C.A.T.D./I.C.A.T.D. and must be compiled for each individual modified item.

1.2.4 **Compilation and transmission of form TO-4**

In order to assure that the greatest possible number of CATDs issued on the C.I. concerned are implemented during overhaul works at companies, the company must compile a special report (attachment 4) on its CATD implementation program, and send it to the A.F. / S.B. Central Office concerned.

This report must be compiled during the assessment phase and transmitted immediately after.

The report will only include CATDs that have not yet been implemented on the aircraft or C.I. concerned.

Based on the information in this report, the A.F. / S.B. Central Office will take all possible steps to obtain the necessary kits and/or parts elsewhere in order to have them promptly delivered to the designated Company.

1.2.5 Compilation and transmission of form TO-5

Form TO-5 (attachment 5) is used to indicate the configuration reached by a system with respect to its envisaged configuration, at the time that system is adopted by the A.F. / S.B..

It must be sent to the following offices:

- The Central Office of the A.F. / S.B. concerned;
- the Company responsible for the higher level system (if different).

The following internationally acknowledged acronyms indicating compliance status must be inserted in the individual columns of the form:

(1) P.C.W. (Previously Complied With): for C.A.T.D./C.O.T.D. that have been executed prior to arrival of the aircraft, engine, missile or equipment;

(2) C.W. (Complied With): for C.A.T.D. executed during the period of time the aircraft, engine, missile or equipment was present in Company for overhaul and/or repair works;

(3) Partially C.W.: for C.A.T.D. partially executed for reasons that must be indicated in the specific “NOTES” column;

(4) N.C.W. (Not Complied With): for C.A.T.D. applicable but not executed. Indicate reasons for non-application in the column provided;

(5) N.A. (Not Applicable) for C.A.T.D. for which non-applicability to the part, aircraft, engine, etc. has been ascertained.

Form TO-5 must also be compiled for aircraft and related C.I.s coming out of production.

If errors or omissions are found with respect to the characteristic documentation accompanying the aircraft, engine, missile or equipment, the Company must report the problem to the technical Office responsible for the maintenance service of the Organisation that delivered the aircraft and C.I., and determine the source of the errors or omissions.

1.2.6 Compilation and transmission of C.A.T.D./C.O.T.D. compliance report for ground and on-board equipment

The Companies are required to compile and transmit a report similar to the TO-5 to the same addresses and in the same way as described in the previous paragraph.

There is no particular type of form that the Companies must use for this report, hut it is essential that the form includes the data indicated in the previous paragraph.

Generally this will not concern a single item but will refer to a batch of items (for example, all items processed together) indicating the corresponding S/Ns.

FORM TO-2

SITUATION OF KITS REQUIRED FOR AIRCRAFT- C.I.s FOR C.A.T.D./C.O.T.D. IMPLEMENTATION

N° C.A.T.D./C.O.T.D.. …….. Date…… Technical Level.....

TITLE:

.....

.....

Non-ARMAEREO source requirements of C.A.T.D. n°…….....data…….

Form TO-1 (if required) on (date)..... for n°..... kits

and/or for n°..... parts sets

Kits received on ..... quantity.....

on ..... quantity.....

on ..... quantity.....

on ..... quantity.....

Parts sets received on..... quantity.....

on..... quantity.....

on..... quantity.....

on..... quantity.....

LIST OF S/Ns MSNs

MSN or S/N.	NOTES	**MSN or S/N**	NOTES

MSN or S/N.	NOTES	**MSN or S/N**	NOTES

WARNING

The list of serial numbers must be continually updated in order to determine the number of kits or sets of parts required by the Maintenance division at any time.

The “NOTES” column must indicate transfers of material from or to another Division that takes place in the time period between the date of transmission of the request for material (kits and/or parts sets) for the aircraft, engines, etc. awaiting receipt of the material itself.

This serves to immediately established which kits or parts sets must be shipped to or requested from another division.

Attachment 2

FORM TO-2A

SITUATION OF C.A.T.D./I.C.A.T.D. IMPLEMENTATION ON AIRCRAFT OR C.I.s CONCERNED

C.A.T.D. N° DATE SOURCE

TITLE:

INSPECTION OR CONTROL ☐

REWORKING OR MODIFICATION ☐

KIT ☐

PARTS SETS ☐

IMMEDIATE ACTION ☐

URGENT ACTION ☐

EXECUTION TIME LIMIT

_____

_____

_____

_____

KIT, PARTS SETS

1) ESTIMATE APPROVAL DATE:

2) FORESEEN DELIVERY DATE:

3) EFFECTIVE DELIVERY DATE:

PUBLICATION UPDATES:

1) LIST

2) FORESEEN DELIVERY DATE

3) EFFECTIVE DELIVERY DATE:

SYSTEM (3)……TYPE OR MODEL AND/OR P/N.....……..…

MSN or S/N (4)	0	1	2	3	4	5	6	7	8	9

KEY : ☐ = NOT YET IMPLEMENTED
▒ = NON-EXISTENT OR F.U.

CW = IMPLEMENTED
PART. CW = PARTIALLY IMPLEMENTED
NA = NOT APPLICABLE

COMPILED BY:
CHECKED BY:
APPROVED BY:

(3) Indicate: aircraft, engine, missile or equipment
(4) Indicate the MSN or S/N excluding final figure

FORM TO-3

Stamp of Compiling Office

C.A.T.D./I.C.A.T.D./C.O.T.D. COMPLIANCE REPORT

Applicable Technical Directive..... Date.....

Aircraft Mod. ..... MSN .....

C.I. Mod. ..... S/N. .....

C.I. Mod. ..... S/N. .....

COMPLIANCE RESULT: N/A ☐ C/W ☐ P/C/W ☐

SIGNATURE OF SPECIALIST
(WHO EXECUTED THE WORKS)

SIGNATURE OF TECHNICAL OFFICER IN CHARGE OF MAINTENANCE
(Certifies: execution and registration of C:A:T:D implementation on required documents and Form TO-2A)

MAINTENANCE DIVISION HEAD

..... li .....

Attachment 4

FORM TO-4

AVAILABILITY OF KITS OR PARTS SETS FOR IMPLEMENTING C.A.T.D. ON AIRCRAFT OR C.I.s IN OVERHAUL

- WORKS SCHEDULE –

_____

(Technical Level 3 Maintenance Division Stamp)

Aircraft: Mod..... MSN. ..... Works: .....
(IRAN - R.G. – A.M.C. – Repair – etc.)

C.I.: Mod..... (S/N) ..... Works: .....

C.I. : Mod..... (S/N) .... Works: .....

Estimate process time (months) .....

Source department: ..... Date of arrival from Department.....

TECHNICAL DIRECTIVE			KIT		Parts sets		Scheduled for works	NOTES
NUMBER 1	Date 2	SOURCE 3	**Req 'd.**	**Avail.**	**Req 'd**	**Avail.**		

FORM TO-5

_____

(Technical Level 3 Maintenance Division Stamp)

STATE OF IMPLEMENTATION OF MODIFICATIONS AFTER PROCESSING

AIRCRAFT – C.I.s

Aircraft Mod. ..... MSN .....

C.I. Mod. ..... S/N .....

C.I. Mod./P/N ..... S/N.....

Date of arrival..... Date of departure.....

Type of works.....

C.A.T.D. COMPLIANCE SITUATION

TECHNICAL DIRECTIVE	DATE	SOURCE	COMPLIANCE STATUS					REASON FOR NON-COMPLIANCE
			PCW	CW	NCW	PART CW	N/A	

If possible this print-out may be copied by the Company concerned.