# 0 INTRODUCTION

## 0.1 Content



The term "**Dassault Aviation Business Services SA**" will be use during any EASA Part 145 activity such as on/within Maintenance Work Package, Purchase Orders, invoices, Certification, approved manuals and procedures. The term "**DABS**" will be use in this manual.

## 0.2 Purpose

This Procedure describes the process for compliance of a maintenance work in DABS part 145 AMO. It ensures that any maintenance has been performed and released correctly i.a.w maintenance ordered by the Customer.

## 0.3 Applicability

This procedure is applicable to the personnel in the **Technical services** and maintenance department.
It concerns aircraft maintained in DABS AMO under EASA approval: CH.145.0248 and other agreement (refer to DA-0108).

## 0.4 References

- MOE (DA-0100)
- Capability list (DA-0105)
- Approval Scope (DA-0108)
- Forms in Work Package (DA-0110)
- Incoming inspection (DA-0046)
- Outgoing inspection (DA-0045)

## 0.5 Abbreviations and definitions

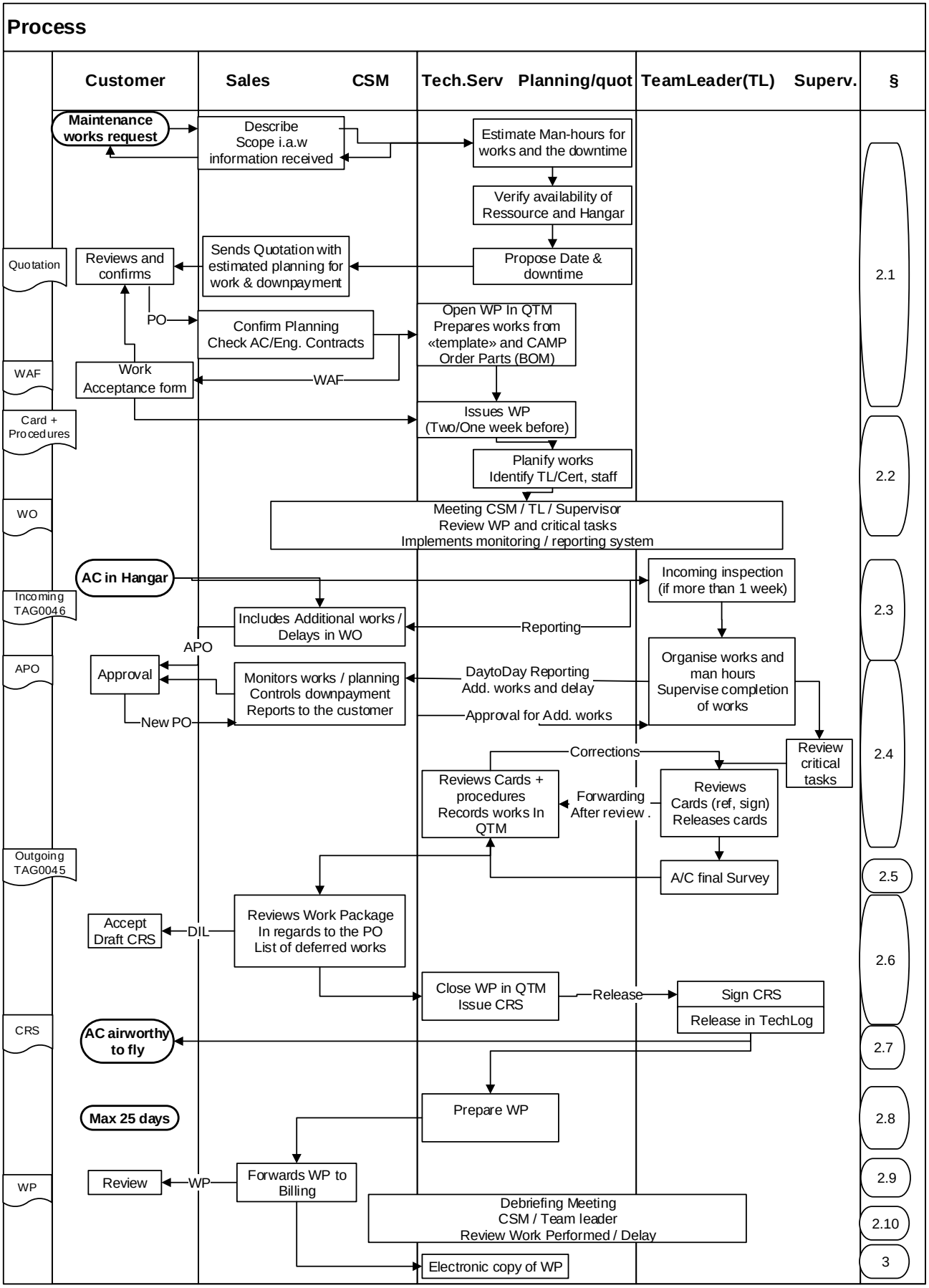
- **AMO** Approved Part 145 Maintenance Organisation
- **APO** Additional Purchase Order
- **CMTS** Computerised Maintenance Tracking System software used by the Customer to monitor operational and continuing airworthiness control of the aircraft. Could be CAMP.
- **PO** Purchase Order - Official request to perform specific maintenance tasks that includes a list of tasks and associated instructions
- **Quantum (QTM)** Software used in maintenance to record, issue and track all maintenance works performed in DABS AMO
- Significant scheduled maintenance = maintenance more than one week
- **WP** Work Pack - used to describe the package prepared to ensure record of accomplishment of tasks, including task cards and associated maintenance data.
- **Work Package** used to describe the final package with all records ensuring that maintenance has been performed.

# 1 GENERAL

## 1.1 Responsibility

Refer to MOE §1.4

## 1.2 Process


Process
Customer
Sales
CSM
Tech.Serv
Planning/quot
TeamLeader(TL)
Superv.
§
Maintenance works request
Describe Scope i.a.w information received
Estimate Man-hours for works and the downtime
Verify availability of Ressource and Hangar
Propose Date & downtime
Sends Quotation with estimated planning for work & downpayment
Reviews and confirms
Quotation
PO
Confirm Planning Check AC/Eng. Contracts
Open WP In QTM Prepares works from «template» and CAMP Order Parts (BOM)
WAF
Work Acceptance form
WAF
Card + Procedures
Issues WP (Two/One week before)
Planify works Identify TL/Cert, staff
WO
Meeting CSM / TL / Supervisor Review WP and critical tasks Implements monitoring / reporting system
AC in Hangar
Incoming inspection (if more than 1 week)
Incoming TAG0046
Includes Additional works / Delays in WO
Reporting
APO
APO
Approval
Monitors works / planning Controls downpayment Reports to the customer
DaytoDay Reporting Add. works and delay
Organise works and man hours Supervise completion of works
New PO
Approval for Add. works
Corrections
Review critical tasks
Reviews Cards + procedures Records works In QTM
Forwarding After review .
Reviews Cards (ref, sign) Releases cards
Outgoing TAG0045
A/C final Survey
Accept Draft CRS
DIL
Reviews Work Package In regards to the PO List of deferred works
Close WP in QTM Issue CRS
Release
Sign CRS
Release in TechLog
CRS
AC airworthy to fly
Max 25 days
Prepare WP
Review
WP
Forwards WP to Billing
Debriefing Meeting CSM / Team leader Review Work Performed / Delay
Electronic copy of WP
2.1
2.2
2.3
2.4
2.5
2.6
2.7
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2.9
2.10
3

# 2 WORK PROCESS

## 2.1 Acceptance policy

The **CSM** is in charge to act in liaison between DABS and the customers.

The original request is to be issued and provided to DABS no later than 30 days prior to the aircraft's arrival at the facilities and must include, but is not limited to, the scheduled maintenance items (Inspections + Due).

Before accepting an Aircraft/Component for maintenance/repair, the Sales department has to make sure conformity with the following conditions in relation with the maintenance and the **Technical services**:

a) The approved scope of work is not exceeded (refer to Approval Scope and Capability List – DA-0105).
b) All data are available and up to date (Maintenance, Overhaul and Parts Manuals, SBs, ADs, **Maintenance programme**, Supplements, Contract, etc.).
c) The required component/part/material is on stock or will be available in time.

The **Sales department** and the **Planning department** determine the scope and evaluate the Man-Hours required in accordance with the request of the Customer.

The **Planning Department** evaluates the proposed Scope, estimated Man-Hours and estimated date for beginning of works i.a.w the following criteria and proposes a planning to the **Sales.**

a) The actual workload allows acceptance of work.
b) Equipment/Tools are available and calibrated.
c) personnel are available, including AC-rated staff and certifying staff.

In case all the above conditions are met, the **Sales** send a Quotation to the **Customer.**
Data required for maintenance like Supplement maintenance, STC, specific data, interiors specification, approved data and access to the CMTS must be requested to the customer.
Should the above conditions be exceeded, the work shall be delayed, refused or contracted outside.

When the **Sales** received the Purchase Order (PO) signed from the customer, the **Planning** department confirms the planning to the maintenance department and the **Technical services**;
**The Technical services** ensures the following;

- Checks specific contracts (MSP, JSSI, ESP, Smart Part, Warranty...), opens WP for contracts / warranty completion and informs Billing department for down-payment;
- Sends a copy of Quotation + PO to Billing department;
- Opens a WP in QUANTUM and ensures all data are setup (especially billing address) and creates tasks to be performed from templates in Quantum;
- Prepares Work Acceptance form (WAF) to the **CSM**;
- Prepares the Work package for the maintenance department;
- Orders parts necessary (QUANTUM is used to transfer the order to the logistic department);

The **maintenance department** designates the **Team Leader** in charge of the maintenance event and the **appropriate Certifying staff** releasing the Aircraft.

## 2.2 Work Pack

### 2.2.1 Preparation

The **Technical services** is in charge for preparation of the WP. He is in charge to:

- Analyse works requested in accordance with:
  - The PO from the Customer (It must refer the Customer Maintenance Programme and CMTS);
  - Supplementary items;
  - ADs;
- Prepare the WP (including incoming inspection and final outgoing). Tasks, AD or SB have to be assessed due to aircraft configuration, and work not applicable should be marked "N/A" and signed.
- Review the Purchase Order and request if necessary:
  - Supplemental data in case of specific tasks (STC / Mods / Repairs)

The WP is always based on the customer PO, which contains:

- Work specifications where all maintenance tasks are described and referenced;
- Task cards issued from QUANTUM.
- Associate Procedures/ Specific data if appropriate. If procedures are issued from CMTS, the revision status must be checked with current documentation;
- SBs and ADs;

In case of insurance issue, additional WP must be created and sent to the appropriate company.

- Acceptance of the changes in case of supplementary work

WP should be issued ~1 or 2 week before the beginning of the maintenance work.
A work Acceptance Form (WAF) is sent to the customer to formalise the work to be performed.
If task cards and associated data are issued by the Customer, status must be written confirmed.

### 2.2.2 Input meeting

A meeting between the **CSM** and the **Team Leader** hold before the work. It permits to:

- Review the Work Order and tasks should be performed including assessment of ADs/SBs;
- Order parts or tools missing;
- Identify critical tasks – (Task cards must be stamped) ;
- Identify subcontracted / contracted tasks including reporting method with the subcontractor;
- Adjust the planning (if required) and resources;
- Valid a Reporting method, if appropriate;
- Schedule review meeting;

If it is found necessary to change the WP contents, the **CSM** informs the **Customer** about these changes and get a written confirmation of the acceptance of the changes. These changes are to be reflected in Additional Purchase Order (APO) or in the Purchase Order (PO) revision (e.g., Rev. 1).
If it is cancelled, the **Sales** informs the **Billing department** about cancellation, parts already ordered or received, Labour already booked.

### 2.2.3 Code for task

**ALL Tasks** shall be numbered in QUANTUM as follows:

**INSPECTIONS**

0 Incoming inspection
1 to 89 Airframe inspection (i.a.w camp codes)
90 Basic inspection
100 to 198 Engine #1 inspection
199 Engine #1 run-up after maintenance operation
200 to 298 Engine #2 inspection
299 Engine #2 run-up after maintenance operation
300 to 398 Engine #3 inspection
399 Engine #3 run-up after maintenance operation
400 to 498 APU inspection
499 APU run-up after maintenance operation
501 to 999 Customer Specific inspection

**DUE List**

10001 to 19999 Due list

**Modifications**

20001 to 29998 Service Bulletins / modifications
29999 Weight and balance amendment

**SUPP WORKS**

30001 to 39999 Supp works mechanics / engines / removal, installation engine / APU.
40001 to 49999 Supp works electric / avionics
50001 to 59999 supp works structural
60001 to 69999 Supp works cabine
-62501 Cabin Removal/Reinstallation
-625xx for work in the Hangar
-661xx for work in the Shop UPHOLSTERY
-665xx for work in the Shop CABINETRY

**Cleaning / ramp service**

70001 to 79999 Cleaning / ramp service

**Airworthiness Directives**

80001 to 89999 Airworthiness Directives

**Additional**

90001 Panel removal / installation
90010 Outcoming inspection
92001 subcontracted Painting work
99001 to 99899 Miscellaneous
99900 ICA documentation for the customer
99990 to 99999 SEA / WAB / reason in case of aircraft not ready to service

## 2.3 Incoming inspection

An Incoming inspection may be performed (DA-0046). It includes a walk around inspection (interior and exterior of the aircraft) for damage that existed when the aircraft arrive.
This inspection is performed with a **Customer representative** and with **a maintenance personnel** who has the knowledge of the aircraft type.
Defects discovered, Discrepancy described in the Aircraft TechLog and Open MEL items / deferred items should be discussed with the **Customer** and integrated in the WP if appropriate.

A Run up could be performed in case of Base maintenance.
Discrepancies discovered must be referenced directly in the form. Items should be discussed with the **Customer** and integrated in the WP if appropriate.

After the Aircraft arrival, the **Team Leader** must record the airframe, engines and APU hours on the WP.

## 2.4 Work Supervision

The Team Leader is in charge to supervise the completion of all maintenance tasks in accordance with the WP and the scheduled planning.

A daily review is performed between the **Team Leader** and the **CSM** to monitor the downtime of the aircraft and anticipate problem, workload. It permits to adjust the planning and resources if necessary with the **Planning department**.

The **CSM** is in charge to give information to the **Customer** about the status of completion of work.

APO is to be used when considered necessary and if during the completion of a work, it is found necessary to include or remove one or more items on the WP (e.g., discrepancies found during maintenance).
In such a situation, the **CSM** has to contact the **Customer** to get a written confirmation of the acceptance of the changes required (Tasks, planning and costs).

### 2.4.1 Instruction for task card completion (maintenance personnel)

**Maintenance personnel** document the task card with the following information in regards to the Description of Request / Discrepancy:

- Description of Action taken with Removal, Maintenance, Reassembly and Test information.
- Parts used: P/N, S/N on, S/N off
- Procedure / Data used (incl. Revision in case of unscheduled work)
- Reference of calibrated tools used
- Date of work completed
- Signature of personnel performing the work
- Name, Stamp and Signature of inspector/ Rated staff if appropriate in case of inspection of the works (it includes first inspection before independent inspection)
- Signature and description of Independent inspection (if required) by independent staff
- Name, Stamp and Signature of AC-Rated staff who release the work

All Tests must be documented - satisfactory or not - If not, reason must be described (value out of tolerances, monitoring or warning not correct, ...)
All Troubleshooting must be documented, using maintenance procedure, wiring diagram.
The associated procedures have to be dated and marked (STAMP) by the person who performs the work to indicate the status of the task when he stops his work. Signature of each step or only one signature per sheet with bracket is decided in relation with the complexity of the work by the AC-Rated staff.

### 2.4.2 Instruction for task card review

**-Critical task**
The **Supervisor** and **the team leader (base)** or **the CS (line)** is in charge to ensure compliance with the critical tasks' identification (DA-0202 + customer procedure). He ensures that all critical tasks have been inspected in accordance with required standards;

**-Task cards**
The **AC-Rated staff** releasing Task cards is in charge to review relevant Task card for satisfactory completion/signature of works in accordance with:

- Description of actions taken with significant steps (Removal, Maintenance, Reassembly and Test);
- Description of test result or values or trouble shooting
- Reference to the procedure / data used (incl. revision for unscheduled work).
- Reference of calibrated tools used
- Associated data/procedure stamped to ensure a complete record of work performed.
- Signature of independent inspection
- Details of all serialised components installed (including S/N on/off).

**-Work Package**
The **Team Leader** is in charge to ensure final review of the maintenance carried out in task card and to supervise the status of the maintenance event.
He verifies that Task cards are documented with following:

- Test report.
- Release certificate (Form 1 or equivalent).
- Data signed with stamp and bracket
- Drawings / Diagrams, no technical objection statements, CDS as appropriate.

He verifies that WP are documented with following:

- "Protocol of inspection check" Checklists completed by technical services.
- "work report" for subcontracted tasks.

The Team Leader gives cards to the Technical services for records in Quantum.

### 2.4.3 Instruction for record

All following data's are recorded in QUANTUM by the **Technical services**:

- Task work - description, status and action taken;
- Date of performance or deferment or cancellation;
- Personnel releasing the tasks;
- Details of all serialised components installed;

These records concerns troubleshooting, unscheduled and scheduled maintenance.

**In case of task cards are not well documented, the Technical services notify the Team Leader for appropriate corrections.**

## 2.5 Final Outgoing

the **Team Leader** or the **CS** must perform a Final outgoing check to control the **condition and cleanliness** of airplane and equipment. (Form DA-0045).

It includes a full walk around inspection (interior and exterior of the aircraft) for damage, fuel and hydraulic fluid leakage, refitment and security of access panels, missing hand tools / equipment or part of equipment and cleanliness conditions.
In case of discrepancies, the **Team Leader** contacts the **CSM**.

## 2.6 Release of the aircraft

### 2.6.1 Work review

The **CS** is responsible for checking the following before release:

- All tasks described on WP have been performed and inspected, deferred or cancelled;
- Incomplete maintenance, deferred or cancelled work has been accepted by the Customer;
- Limitation in CRS has been discussed and accepted by the Customer;
- All MEL items in "HIL/deferred defect" page have been closed if necessary;
- There are no non-compliances which are known that hazard seriously the flight safety.

### 2.6.2 Release to service

The **Team Leader** ensures that the following are signed by the appropriate Certifying staff (**CS**):

- Release the aircraft in the TechLog
- Aircraft CRS

The **CS** in coordination with the **CSM** is responsible for completing the following on the aircraft flight Technical Log:

- Indicate the following in "Action taken"
  - Type of maintenance performed;
  - Reference to WP;
  - AD, SB, Mods implemented, if appropriate;
  - Change in operations document (AFM, CODDE, FCOM, etc ) if modified;
  - Change in weighing, if appropriate;
- Clear MEL items in "HIL/deferred defect" page if necessary;
- Open MEL items in "HIL/deferred defect" page if necessary;
- Indicate and release Corrective actions taken if defects have been noted;
- Indicate limitation if appropriate;

**After releasing aircraft to service** and prior to departure of the aircraft, the **CSM** must provide the Customer with:

- Copy of Tech log with release to service
- Copy of CRS
- Work summary (Details of work including Work completed/deferred, AD/SB);
- Change in weighing if modified;

The **CSM** is also in charge to debrief the Crews about maintenance performed, changes, ADs, SBs, deferred defects and potential limitation if appropriate.

## 2.7 Work package

Before compiling a Work Package, the **Technical services** should review the work pack for adequate and appropriate completion:

- All tasks described on Work Order have been performed and signed by the Maintenance personnel (**including correct identification of critical tasks / correct description of independent inspection /** correct record of maintenance tasks accomplishment in procedures);
- All release certificate, procedures and appropriate data have been attached to the task card;
- All task cards have been completed and released by a Support staff (AC-Rated staff);
- All procedures have been completed and stamped by the technicians;
- All tasks have been recorded and closed (performed, deferred or cancelled) by the **Technical services**;

The Technical services is in charge to compile and review of the Work Package in reference to DA-0110:

(1) WP cover page (generated by QTM);
(2) WP summary (generated by QTM);
(3) Work Report (WR) (generated by QTM) - Details of work performed and additional information;
(4) Copy of Aircraft flight Technical Log (already signed by appropriate Certifying staff)
(5) CRS (generated by QTM). It includes:
- List of component replaced
- List of work performed
- List of work deferred
- List of any SB or Modifications embodied or AD performed

(6) Log book entry or CRS for the relevant book (Engine(s) / APU) (generated by QTM);
(7) Labour report (generated by QTM);

The **Technical services** reviews the WP and verify if acceptable and in accordance with the standards. Following will be signed:

(1) WP cover page;
(3) Work report;
(7) Labour report (issued only after ensuring that all hours are entered in QTM);

Signatures ensure that:

- Aircraft is airworthy and technically ready for operation;
- All maintenance items due are closed or deferred in accordance with the MEL/CDL;
- All maintenance items due (or overdue) have been discussed and accepted by the Customer;
- All down payments have been done.

**All original Work Packs, certificates and supporting documents should be returned to the customer within maximum 25 days after the issue of a CRS for any maintenance event and retained for the periods detailed in Part 3.**

## 2.8 System Updating

### 2.8.1 Computerised maintenance tracking system Updating

If requested by the customer, the **Technical services** could send the WP to the computerised maintenance tracking system (CMTS) as soon as practical but in no event more than **7 days after the day of the maintenance release**.

## 2.9 Documentation required for the customer

The Technical services is in charge (maximum 25 days) to supply original Work Package to the Customer containing the following information i.a.w DA-0110.

- PO;
- WP summary + WAF;
- Work Report;
- CRS;
- Copy of Aircraft flight Technical Log;
- Detailed maintenance work including:
  - Task card and appropriate data (Procedure/Test Report/drawing/...);
  - Release certificate - Form 1 or equivalent;
  - List of any SB or Modifications embodied or AD performed;
  - Weight and balance amendment if relevant;
- Log book entry or CRS for the relevant documents (Engine(s) / APU);

The Technical services forward to the Billing Department the following information:

- Work Report;
- PO + APO + Due list + External PO + in case of warranty or specific contract (JSSI, MSP, ESP, Warranty completion);
- Labour report;
- Specific documents and reference number in case of insurance is concerned;

The **Billing Department i**s in charge to send the invoice to the Customer.

## 2.10 Debriefing

If appropriate, and decided by the **Technical services**, a meeting is holding between the **Team Leader** and the **CSM** to evaluate the maintenance works performed. Following items should be discussed:

- Planning and work scheduled
- Additional works and monitoring of it
- Items not closed / Items deferred
- Logistic / Parts problem
- Delay
- Resources problems

# 3 RECORDS

## 3.1 Retention

WP is kept in QUANTUM.

The **Technical services** retains an electronic copy of the work package during five (5) years in accordance with Part 145 requirements. All records shall be kept in a manner that ensures protection from damage, alteration and theft.

Scanned copies of the Task cards and release certificate (Form 1) are sent to CMTS by email.

## 3.2 Corrections

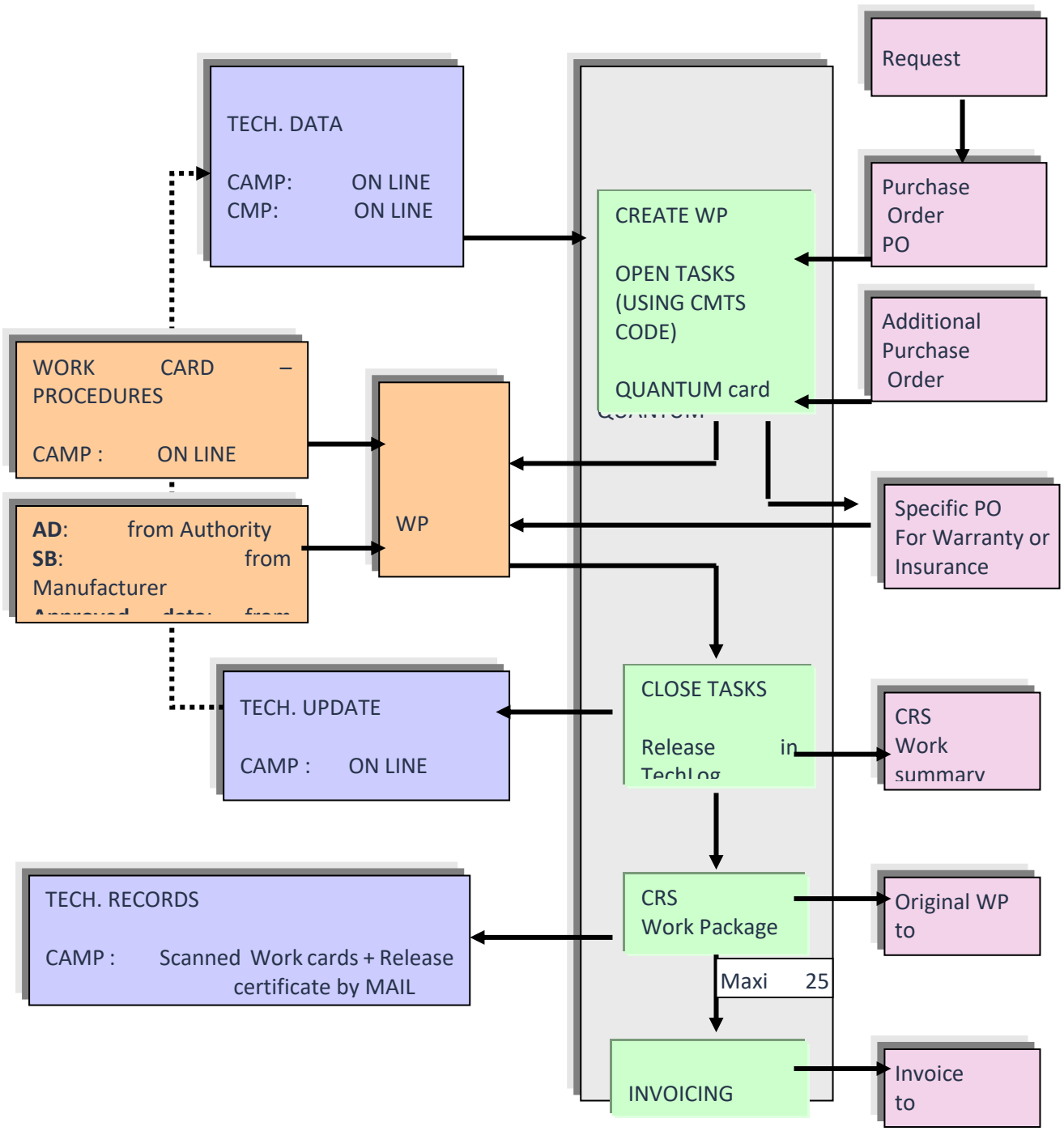
If any error is found, it could be corrected only by:

- Drawing a single line through the incorrect entry and enter the correct entry on the next available line.
- No erasures or blank white-out will be used to correct errors.
- Date, Name and signature of the person performing the correction.

# 4 APPENDIX

## 4.1 Data's information

DABS records all details of maintenance work carried out (ie records necessary to prove that all requirements have been met for issuance of the certificate of Release to service, including subcontractor's release documents).



## 4.2 Process checklist

- **Contact client**
  Quantifier en heure le workscope + Planning
- **Etude faisabilité avec partie 145 (**Disponibilité main d'œuvre et Place Hangar**)**
- Elaboration du devis, mise en place échéancier "down-payment" si nécessaire
  (à communiquer au département Billing)
- Après acceptation devis - Réception PO - Entrer donnés dans QUANTUM
  Confirmer le créneau au Planning Mgr - Nommer un Team leader + staff who will release
  Envoyer "Work acceptance Form"
  Mettre en place avec le client un mode de reporting approprié.
- **Commande des Pièces**
  Approvisionnement du standard – Fonction protocole standard à définir
- Compilation du WO, doit être disponible pour la maintenance 1 semaine avant le chantier
- **1 semaine avant le chantier, Réunion CSM, Team Leader**
  Passage en revue du WP – Définition des Critical Tasks - pièce a commander -
- "Incoming inspection" DA-0046 - BT + Team Leader - Arrivée avion ➤ Points supplémentaires
- **Review avec le client (**WP / Points supplémentaires / Points déférés / Planning**)**
- Tous travaux sous contrats/Garantie (MSP, JSSI, ESP, Bombardier) doivent être préalablement approuvés par la société contractée. doit être renseignées dans QUANTUM
- Ouvrir un WP spécifique pour les travaux d'assurance / Dépose-Repose moteur
- Renseigner QUANTUM (Task) si matériel/Parts fournis par le client
- Monitoring du chantier pour respecter les délais et prévenir le client du Statut du Chantier - Quotidien entre CSM et Team Leader - Ajustement
- Etablir des devis additionnels (APO) en cours de visite en fixant préalablement avec le client le seuil des travaux additionnels à deviser - Doit être signé par le client
- Contrôler avec département Billing que les paiements intermédiaires soient bien effectués
- Avant release de l'avion, le AC chief inspecte l'avion pour vérifier son état
  "Outgoing inspection"DA-0045 (propreté – Oubli outil / Part)
- Review du WP par le département technique - Review des points reportés avec le client
- **CRS** de l'avion dans le **Tech log** + Fermer point MEL
- Envoyer au client Tech log + Work summary/CTA pour acceptation avant départ de l'avion.
- Fermeture du WP (date de début et fin de visite dans QUANTUM)
- Transmettre WP, PO avec tous les APO signés, PO spécifique pour assurance ou garantie ou contrat MSP, JSSI, ESP, Bombardier, rapports des heures au Département Billing.
  L'ensemble des propositions (APO+PO) doivent être regroupées en début de dossier
- **Réunion de fin de chantier –** Bilan et Analyse délai et heures – Travaux supplémentaires
- Compléter le WP (CRS, logbook entry, Work Report, AD / SB / Mods List) - Original à envoyer au Client - Maxi 25j
- Facturation
- DABS doit garder une copie du WP (scan)
- Scan + Update CMTS (CAMP)

## 4.3 Process Task cards

| Etapes | Team Leader | Superviseur | Technicien | Commentaires |
|---|---|---|---|---|
| **1/ Revue du Work Pack** (Vérification des Tâches Critiques) | | 1 | | A réception du Work Pack du service préparation, le superviseur affecté au chantier vérifie que les Taches Critiques ont bien été identifiées. Ce peut être fait par un contrôle de type « sampling » pour les WP étant issus des templates déjà été vérifiés.<br>Une attention particulière est à porter sur les tâches non issues des templates. |
| 2/ Remise des cartes / création des cartes pour les findings | 2 | | | Chaque jour le chef avion vérifie que les tâches critiques sont identifiées sur les task card à traiter dans la journée.<br>Il est responsable d'identifier les tâches critiques des Task card qu'il ouvre pour traiter les findings. |
| 3/ Sign off de chaque ligne d'opération sur une task card | | | 3 | Chaque technicien doit se demander si lors de la réalisation de chaque sous-opération (ligne sur la task card), cette opération est critique ou pas<br>Si elle l'est, c'est tout la Carte de travail qui doit être considérée comme Critique. Dans le doute, demander au Superviseur ou chef avion/Rated B1 qui fera la release |
| 4/ Réalise les inspections indépendantes des tâches critiques | | 4 | | Par défaut c'est le superviseur qui réalise ou signe les inspections indépendantes et fait les saisies dans Quantum.<br>Ce peut être fait par une autre personne éligible mais le chef avion est responsable de vérifier que l'opération est faite correctement (date cohérente antérieure à la date de release de la task card et staff éligible) |
| 5/ Release de la Task Card | 5 | | | Par défaut c'est la responsabilité du chef avion assigné au chantier. Il peut déléguer à un staff B1 ayant le rating de l'avion mais le chef avion responsable de cette opération.<br>Après release de la task card, le chef avion doit considérer qu'il n'y aura pas d'autre contrôle avant envoi au client. |