KEY CHANGES FROM DDPMAS VERSION 1.0 TO 2.0

1. The key recommendations made by the external consultant tasked by MoD to review DDPMAS Ver 1.0 have been incorporated in Draft DDPMAS Ver 2.0. Changes made in this regard are detailed below: --

(a) With the aim of minimising stage-gated approvals to enhance process efficiency and accelerate D&D timelines, self-approval has been enabled in non-critical areas during test & evaluation phase of ab-initio design & development of Air System as well as Airborne Stores. This includes self-approvals of test plans & procedures as well as QA activities.

(b) Augmentation of assurance process for testing through enhanced digitisation of testing and reporting process. All test results to be generated and provided to TAA in digital format for faster processing of approvals.

(c) Industry standard Quality Assurance Certification such as AS9102 has been enabled for vendors / sub-contractors.

(d) Joint test & evaluation team constitution for QA & QC requirements during D&D and manufacturing phase to fast track these activities.

2. Outcomes of following three (03) Cross Functional Teams constituted by Joint Airworthiness Committee (JAC) have been incorporated in Draft DDPMAS Ver 2.0: -

- (a) Design Organisation Approval Scheme (DOAS)
- (b) Customer Furnished Equipment (CFE) / Customer Specified Equipment (CSE)
- (c) Usage of Commercial-Off-The Shelf (COTS) items

3. Three (03) dedicated committees were constituted by CE (A) to review and revise some specific provisions in DDPMAS Ver 1.0. The recommendations made by these committees have also been suitably addressed in Draft DDPMAS Ver 2.0. These committees looked into the provisions in the following areas: --

- (a) Configuration Management for Hardware and Software items during ab-initio
 D&D phase well as continuous airworthiness phases
- (b) Research Air Systems and Airborne Stores
- (c) IMTAR-21 Forms

4. The role of System Certification Review Board (SCRB) has been enhanced to act as the Apex Board <u>(similar to an Ombudsman)</u> to handle the issues raised, if any by the D&D

organisations on the dispositions given by CEMILAC / RCMA personnel during the airworthiness certification process of air system / airborne store.

5. A new Chapter-3A has been added to DDPMAS Framework and Procedure document to address "Buy Global – Manufacture in India" acquisition category of DAP-2020 in draft DDPMAS Ver 2.0. This will facilitate GQA oversight in such programs.

6. The modalities of co-development with foreign OEM has been introduced through program specific MOU under Mutual recognition in Framework and applicable IMTAR-21 Subpart U.

7. The certification modalities for Indigenously developed Unmanned Air Systems less than 150 Kg have been aligned with the Drone Rules 2021 issued by Ministry of Civil Aviation (MoCA) and Certification Scheme for Unmanned Aircraft Systems of Quality Council of India (QCI). The same are given in Chapter 6 in DDPMAS Framework & Procedures and IMTAR-21 Subpart B2.

8. The Chapter 8 in DDPMAS Framework & Procedures and IMTAR-21 Subpart I on Research Air System have been revised as per the recommendation of the committee. The necessary clarity has been brought out in terms of TRL and DRCL criteria in the Subpart-I for enabling research and innovation.

9. Subparts under IMTAR-21 Ver 2.0 are proposed to be released as individual documents in .pdf format so as to enable easy reference by various stakeholders. For example, an organisation involved in D&D of airborne materials will be able to completely address all the airworthiness certification aspects as per Subpart C3.

10. Feedback received from various stakeholders while working with the provisions outlined in DDPMAS Ver 1.0 have also been addressed in Draft DDPMAS Ver 2.0. The feedback received pertains to removal of ambiguity, providing clarifications, further refinement & simplification of technical airworthiness requirements and procedures etc. Wherever change to DDPMAS and/or IMTAR was not deemed warranted, suitable justification has been provided. Inputs warranting change to DPPMAS or IMTAR have been incorporated suitably in these documents. Following are some of the key changes included in Draft DDPMAS Ver 2.0 based on the feedback received: –

(a) <u>Indigenous Substitution:</u>

(i) Sub Part K of IMTAR has been revised to include provision for tailoring of airworthiness certification requirements in case of indigenous substitution of airborne

stores in coordination with the TAAs. This shall differentiate ab-initio design & development of airborne stores from indigenous substitution of critical airborne stores.

(ii) Regulation in Subpart K on criticality classification of airborne stores in LTCC has been revised to being in clarity in attributes/criteria for categorizing the stores /components as critical or non-critical.

(iii) Inclusion of airworthiness certification requirements in the RFP for indigenous substitution of airborne stores has been brought out into the revised Sub Part K.

(iv) Regulations and procedures contained in Sub Part K have been fine-tuned to ease out indigenous substitution and to bring in further clarity based on the feedback provided by various agencies.

(b) <u>Certification of Airborne Materials:</u>

The entire Subpart C3 has been revisited and revised based on the detailed feedback received from various stakeholders.

(c) <u>Certification of Airborne Stores:</u>

Letter of Technical Approval (LoTA) has been changed to Letter of Approval (LoA) in line with the nomenclature being followed by other internationally accredited agencies. Accordingly, Sub Part C3 and Sub Part C4 of IMTAR have been modified.

(d) <u>Production of Air Systems & Airborne Stores:</u>

Sub Part F of IMTAR has been revised to bring in clarity on pro-forma for Defect Investigation Report (DIR) during production, to include the requirement of formulation of Reliability & Maintainability Cell and to provide clarity on acceptance testing of production deliverables and periodic testing during production.