Shivaji Stadium Annexe,
New Delhi - 110001
Dated: 27th February 2018

OFFICE MEMORANDUM

Subject: Mandatory Compliance of AEBAS under CSSM component of PMKVY and SOP-reg.

The undersigned is directed to inform that in pursuance of the decision taken by the Steering Committee under PMKVY in its 9th meeting, use of AEBAS (Aadhaar Enabled Biometric Attendance System) for capturing attendance of the trainees and trainers under CSSM component of PMKVY has been made mandatory w.e.f from 1st April, 2018. Till then, the states are advised to begin batches and capture attendance on their MIS Portals/ manual attendance till AEBAS is fully rolled out.

2.   AEBAS monitors the attendance of students enrolled under PMKVY on a real-time basis. The attendance gets captured on a central portal called the Skill Attendance Portal (www.skill.attendance.gov.in) designed by NIC which helps in checking duplication of candidates. AEBAS is currently mandated for use in all training centres except for North East States and J&K. AEBAS forms the basis for the assessment of the enrolled students under the scheme. PMKVY is a fully Aadhar compliant scheme and is also checking the basic candidate details with UIDAI before enrolment into the programs. As the implementation agency for the State Component of PMKVY 2.0, the SSDMs needs to get onboarded onto the Skill Attendance Portal developed by NIC and register all its training centres on it.

3.   The SOP followed by NSDC for carrying out the onboarding process for AEBAS in coordination with NIC is enclosed herewith and may be used by the SSDMs for reference while developing their own mechanisms and procedures to implement AEBAS under CSSM. The SOP enlists various practices that NSDC follows while implementing AEBAS under CSCM. While formulating their own SOP, SSDMs may reach out to their State NIC Officers for any advice and support. For additional support and consultations, SSDMs may contact Shri Vishwajeet V. Ringe, STD & HOD, NIC AEBAS Team, MSDE at ringe@nic.in or at 011-23450945.

4.   This issues with the approval of competent authority.

(Rajnish Kumar Gupta)
Director
Tel. No.: 23450886
E-mail: rk.gupta74@gov.in

Encl: As above

To

1. Mission Director/ Concerned Officials of State Skill Development Missions from 36 States/ UTs
2. Shri Vishwajeet V. Ringe, STD & HOD, NIC AEBAS Team, MSDE with a request for providing necessary support to the SSDMs
3. MD & CEO, NSDC, Aerocity, New Delhi

Copy to:

1. PS to Secretary, MSDE
2. PS to Joint Secretary (Skill Development), MSDE

Aadhar Enabled Biometric Attendance System (AEBAS)
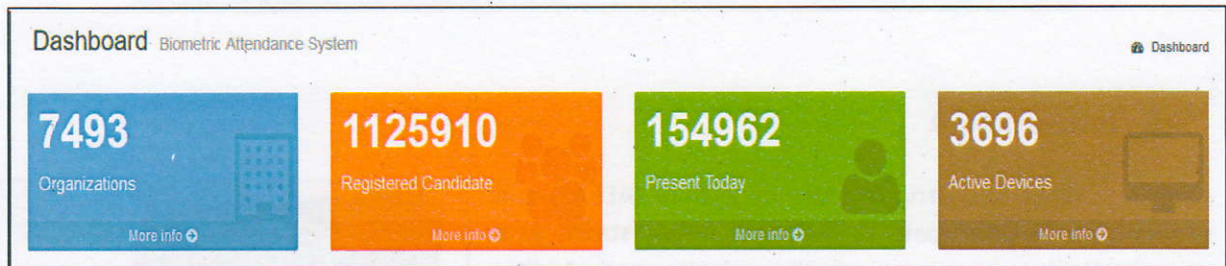
1. Introduction

Aadhar Enabled Biometric Attendance System (AEBAS) is a pre-requisite to participate in PMKVY 2. AEBAS stands as a non-negotiable component of the scheme and Aadhar enabled biometric devices for capturing students' and trainers' attendances is mandatory. The state of Jammu and Kashmir as well as North – Eastern states are exempted from Aadhar enabled biometric attendance.
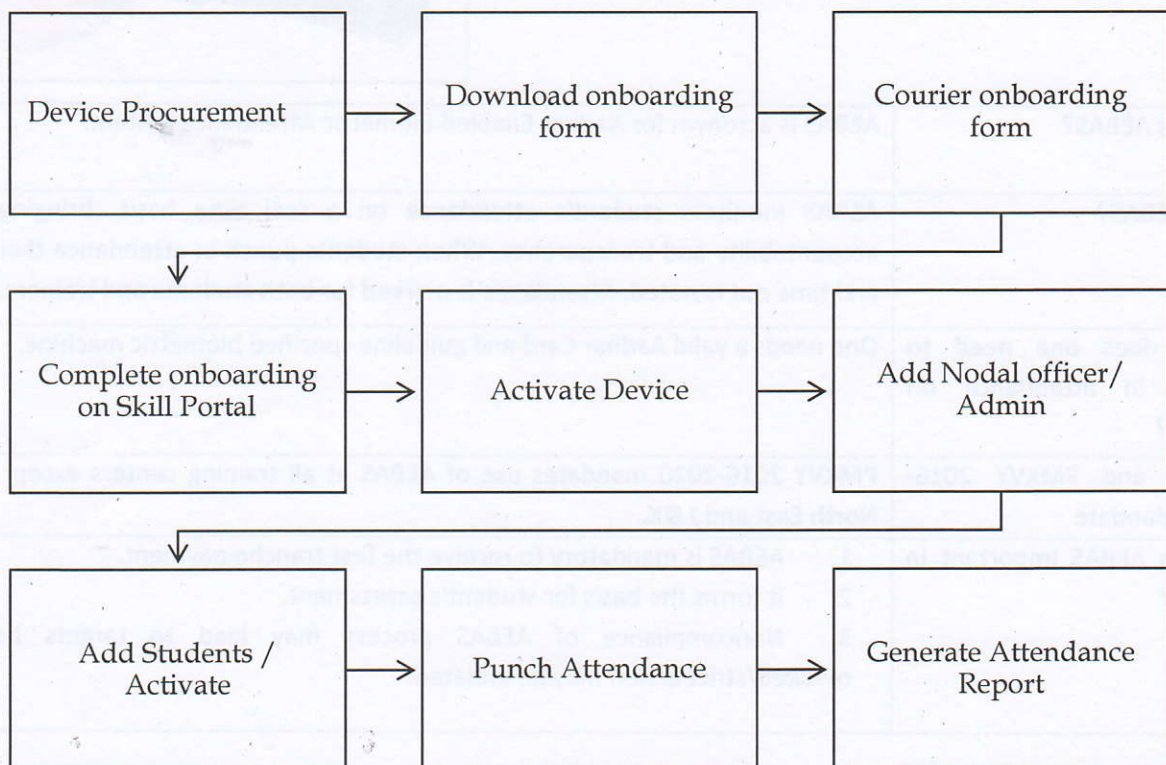

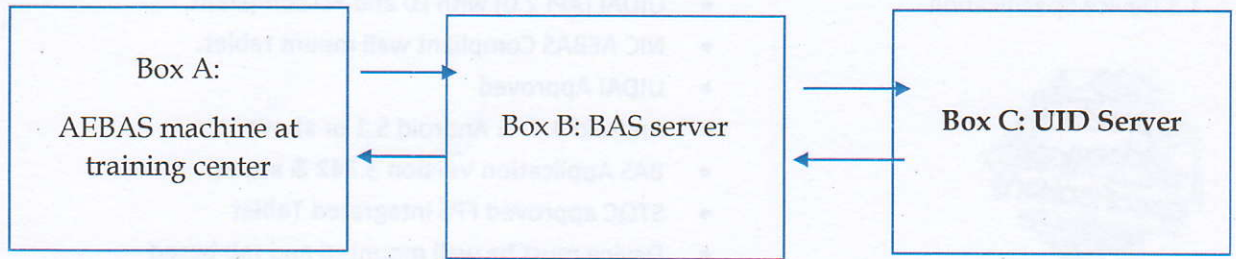|	
What is AEBAS?	AEBAS is acronym for Aadhar Enabled Biometric Attendance System.
Why AEBAS?	AEBAS monitors student's attendance on a real time basis, bringing in accountability and transparency. When students punch in attendance their in and time out is noted. Attendance is marked for both students and trainers.
What does one need to punch in attendance on AEBAS?	One needs a valid Aadhar Card and guideline specified biometric machine.
AEBAS and PMKVY 2016-2020 Mandate	PMKVY 2016-2020 mandates use of AEBAS at all training centers except for North East and J &K.
Why is AEBAS important in PMKVY	1. AEBAS is mandatory to receive the first tranche payment. 2. It forms the basis for student's assessment. 3. Noncompliance of AEBAS process may lead to targets being revoked/strict action may be initiated.

1.1 AEBAS – PMKVY Dashboard - Snapshot

Dashboard Biometric Attendance System   🏠 Dashboard

7493 Organizations	**1125910** Registered Candidate	**154962** Present Today	**3696** Active Devices
More info ➔	More info ➔	More info ➔	More info ➔

1.2 Process Flow of AEBAS

```
Device Procurement  →  Download onboarding form  →  Courier onboarding form
                                                              ↓
Complete onboarding   →  Activate Device  →  Add Nodal officer/
on Skill Portal                               Admin
        ↓
Add Students /  →  Punch Attendance  →  Generate Attendance
Activate                                 Report
```

Box A: AEBAS machine at training center	→ **Box B: BAS server** ←	→ **Box C: UID Server** ←

Table: 1 Process flow of AEBAS inflow of information

1. Students punches in attendance at box A (AEBAS) machine. Information like that of biometric match, name, other detail capture in Aadhar Card is sent to Box B.
2. Box B is the BAS server which received the information, and then further sends to UID server which is Box C
3. UID server authenticates the information receive, if the details matches to the database attendance is marked successfully. In case it does not match then an error code is generated which is shown on the tab at the training center.
4. All information which is exchanged from Box A-B-C and back is encrypted as specified by the Aadhar guidelines.

2. AEBAS stages installation and compliance

Stage: 1 Center Accreditation and Affiliation & Compliance	
1.Center Accreditation and Affiliation Process/ Compliance	Training Center must have an AEBAS machine while applying for Center Accreditation and Process. In case of non-availability of machine, center is 'conditionally' affiliated. Training center must get AEBAS within two months of getting affiliated failing which conditional accreditation is withdrawn.
1.1Device Procurement	Accreditation of center is based on availability of AEBAS hence device procurement should be initiated prior to /or as soon as filling up application of accreditation process
1.2 Where can the device be procured from?	Device can be procured from https://gem.gov.in/

1.3 Device Specification	A device must meet the below specification: • UIDAI (API 2.0) with L0 and RD compliant. • NIC AEBAS Compliant wall mount tablet. • UIDAI Approved • Android 4.4. & Android 5.1 or above • BAS Application Version 3.342 & above • STQC approved FPS integrated Tablet • Device must be wall mounted and tab based
1.4 Number of devices to be installed?	It is recommended to install 1 device per 30-40 students.

Stage 2: Post Target Allocation

2.1 Download the onboarding form	Once the target is received, TP should download onboarding form as given on https://goo.gl/NAuPnz. Onboarding of AEBAS should be parallel to all the processes. Onboarding takes about 14 working days.
2.2 Instruction to fill the onboarding form	• Fill in the form in capital letter or type it out • Nodal and IT officer are the two people to be appointed from within your organization. • Sign only on right side of form, left side is for NSDC to sign and stamp • Form is rejected in case of incomplete details. *Always keep a scanned copy of the filled form for reference.*
2.3 Post the filled form.	Filled form to be sent to: National Skill Development Corporation 301, 3rd Floor , West Wing, Worldmark 1, Aerocity New Delhi-110037

Stage: 3 Process and timeline of onboarding

3.1 Form Processing Timeline	• Once the hard copy of the form reaches at the address mentioned above, it takes about seven to eight working to process the same.
	• Day 8th – Organization name appears on http://skill.attendance.gov.in/register/organization
	• Click the drop-down option
	• Select your organization name
	• Fill in the details
	• Details should be same as sent in the form
	• Submit the form
	• In 3-4 days login credential are sent to the nodal officer email ID
	• Please check nodal officer inbox as well as SPAM folder.
3.4 Device Activation	• For device to be activated nodal officer must complete all the steps mentioned on the portal (http://skill.attendance.gov.in/register/organization)
	• Nodal officer must make necessary global master entry after logging on the Portal with the credentials received from AEBAS team e.g. Manage Masters, Division, Units, Trade/Job profile, Details of the Trainee $ Trainer, Office location (sent with credentials), Device location, Shifts of Batches, Office timings.
	• One of the candidate or Trainer or Nodal Officer is to be made the Biometric Administrator. This can be done on the device (Manage Device>Add Biometric Admin). Please ensure that whoever is made the biometric admin must be registered and activated on the portal.
	• Nodal officer will have to generate activation code for Biometric Admin (Manage device->Activation Code)
	• AEBAS Wall mount DEVICE to be preconfigured by the Vendor or instructions and software to be download from http://basreports.attendance.gov.in/downloads/
	• Open the AEBAS app in the wall mount device, select domain as skill development and enter the activation code generated and click on lock icon.
	• Select Entry point i.e. Device location entered by Nodal officer.

- Scan finger of Biometric Admin for whom Activation code was generated.
- After Scanning finger of Biometric Admin, in case of Invalid Activation code Please check the Device location in the portal, Status must be like this as shown below, here Deactivate means device location is Activated:

3.3 Candidate Registration

This way To Registration

Once the master entries as mentioned in the preceding section are made by the Nodal officer, Candidate may register themselves on the respective TC URL(allocated by NIC AEBAS Team) without logging in by choosing Candidate Registration tab and fill their Personal details like Candidate Name, Aadhar no, D.O.B etc. and Organization Details like Candidate type i.e. Non-Government designation as Trainee/Trainer/Training Head or as applicable.

3.4 Marking Attendance

- After registration of all the candidates by Nodal officers or Candidate by themselves on the URL (Provided to TP/TCs by helpdesk team
- The Attendance ID will be generated from your Aadhaar number, the last 8 digit number of their Aadhar is attendance id for each student. The attendance ID will only be active to mark attendance only when your Aadhaar information is verified by UIDAI and activated by you Nodal officer.
- Attendance ID has also been sent by SMS to your registered Mobile Number. Enter your 8-digit Attendance ID on Screen.
- A Red light will start to glow on Finger Print Scanner (Wall mount Tablet/USB device).
- Now put any one of your fingers on the Finger Print Scanner.
- DO NOT move your finger on scanner otherwise finger prints will not be properly scanned.
- DO NOT Press very hard on Finger Print Scanner.
- Once the screen shows "Authenticating, Please Wait". Remove your finger from the scanner.
- A pop-up screen will show your Photo and Attendance Type as "Opening" for the first time you mark the attendance for that day

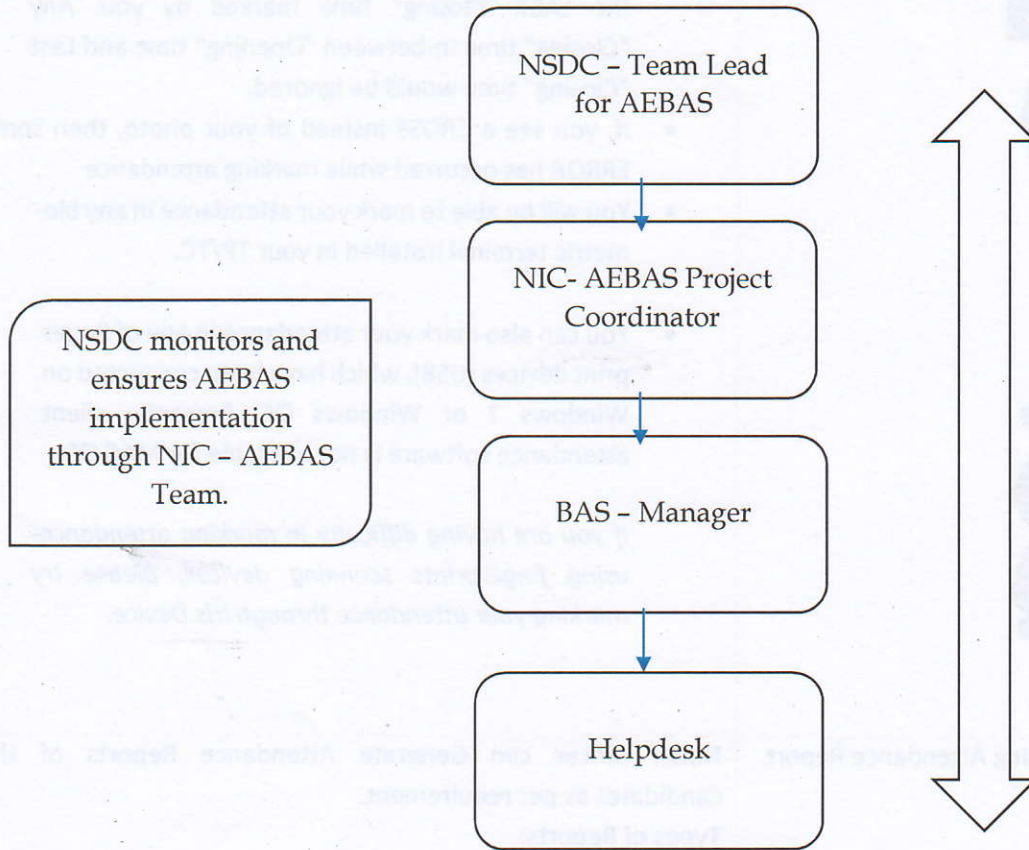|	
	• If Attendance Type is "Closing" then it will be counted as OUT Time. However, OUT time would be the LAST "Closing" time marked by you. Any "Closing" time in-between "Opening" time and Last "Closing" time would be ignored. • If, you see a CROSS instead of your photo, then some ERROR has occurred while marking attendance • You will be able to mark your attendance in any bio-metric terminal installed in your TP/TC. • You can also mark your attendance in any of finger print devices (USB), which have been connected on Windows 7 or Windows OS. Presently client attendance software is not available for MAC OS. *If you are having difficulty in marking attendance-using fingerprints scanning devices, please try marking your attendance through Iris Device.*
3.5 Generating Attendance Report	Nodal officer can Generate Attendance Reports of the candidates as per requirement. Types of Reports: 1. Attendance Today 2. Attendance Register 3. Advance Reports 4. Dynamic Advance Reports 5. Date wise Attendance 6. Dynamic Date wise Attendance 7. Weekly/Monthly Report 8. Shift Report etc. Students may also check their attendance itself by choosing Candidate Login tab and enter their attendance ID, an OTP will sent to Candidate's registered mobile no. for login.

3. Roles and Responsibility of Various Stakeholder in the AEBAS Process

```
                              ┌─────────────────────┐
                              │   NSDC – Team Lead   │
                              │      for AEBAS       │
                              └─────────────────────┘
                                         │
┌─────────────────────────┐              ▼
│  NSDC monitors and      │   ┌─────────────────────┐
│  ensures AEBAS          │   │  NIC- AEBAS Project  │
│  implementation         │   │     Coordinator      │
│  through NIC – AEBAS    │   └─────────────────────┘
│  Team.                  │              │
└─────────────────────────┘              ▼
                              ┌─────────────────────┐
                              │    BAS – Manager     │
                              └─────────────────────┘
                                         │
                                         ▼
                              ┌─────────────────────┐
                              │      Helpdesk        │
                              └─────────────────────┘
```

Issues	Role/ Responsibility
Device issue	TP to connect with the device vendor
Software issue	AEBAS helpdesk can assist over phone but in case of no resolution , connect with device vendor
RD issue	Device Vendor
Form Onboarding	Nodal officer of center
Login credential	AEBAS team
Reset of password	AEBAS Manager
Form status	AEBAS team- Helpdesk
Wrong credential and password	AEBAS Manager
Domain issue	AEBAS Manager
Attendance Report Generation issue	AEBAS Manager
Device Activation	AEBAS- Helpdesk
Adding Biometric Administrator / student	AEBAS- Helpdesk
Internet Issue	Connect to the internet provider

Biometric mismatch of students	Students to update the credential at the nearest Aadhar Kendra. Keep a record of requisition slip
Medical issue in fingerprints of students	Medical report or install iris machine

3.1 Escalation Matrix

Query Related	L1 Support	L2 Support	L3 Support	L4 Support
	P1 - 4 Hrs.	P2 - 8 Hrs.	P3 -24 (12 Working hrs.)	P4 - 48 Hrs.(24 Working hrs.)
All General Queries / Organization Onboarding	helpdesk-skill@gov.in	aebasonboarding-skill@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in
Candidate Registration Related	helpdesk-skill@gov.in	aebasonboarding-skill@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in
Software Download and Other Querry	helpdesk-skill@gov.in	aebasonboarding-skill@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in
SubDomain Related	helpdesk-skill@gov.in	bas-msde@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in
Credantial Related	helpdesk-skill@gov.in	bas-msde@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in
BAS Device Related	helpdesk-skill@gov.in	aebasdevice-skill@gov.in	aebasmgr-skill@gov.in	aebasmgr2-skill@gov.in

Internal Escalation Matrix for Skill Attendance Portal
Helpdesk Support Number- 011-47451663/47451664
Raise Ticket at support.attendance.gov.in

In case there is no response in defined timeline as given above please send a reminder to AEBAS team to CC to NSDC team lead.

4. Issues and Challenges

Issue/ Challenge	Description
Device Procurement	There are no empaneled vendors, hence the price of device can go up to Rs 1700 per device. Training Partners find it cost intensive and more often would use one device for attendance. In case of device failure there is no attendance.
Training Partners don't understand the technicalities and functioning of AEBAS	This is a major challenge faced as all the centers are using the AEBAS for first time and there are multiple technical steps.

Server Issues from BAS-NIC	In last one year there has been more than five outages lasting each time up to three days
Six-month caveat for implementing AEBAS	Now revoked
No financial penalty for non-compliance	Now revoked
Non-integration with SDMS	Completed in December 2017
Delayed or no response from NIC AEBAS team	NSDC though in monitoring role has to take over operational function of AEBAS team due to delay and non-responsiveness to queries.
Internet connection in the country	In most part of the country the internet connection is not stable and if present does not have enough bandwidth for marking attendance
Lack of monitoring	Monitoring on AEBAS needs to be done robust
Inclusion of Tranche 1 payment clause only on AEBAS commencement	FRS needs to build and worked on

4.1 Error Codes

Errors could be generated in the following cases :

1. Internet issue at the center
2. Slow response from BAS server
3. Issue in BAS server
4. UID server down

List of error codes is given below with corresponding response/ meaning.

300: Biometric data did not match.

330: Biometric locked. Kindly contact UIDAI Helpline.

500: Invalid encryption of Skey.

502: Invalid encryption of PID.

511: Invalid PID XML format.

561: Request expired.

562: Timestamp value is future time (value specified "Pid->ts" is ahead of authentication server time beyond acceptable threshold).

800: Invalid biometric data.

811: Missing biometric data in CIDR for the given Aadhaar number.

951: Biometric lock related technical error. Kindly contact UIDAI Helpline.

997: Biometric corrupt at UIDAI.

998: Template not in Aadhaar. Try after 15 minutes after first Try.

1201: ASA Connectivity Lost to UIDAI.

1204: No Response UIDAI.

1205: Delay in response from AUA/ASA to UIDAI.

9901: Technical Error.

9902: User Not Registered.

9903: Invalid Device.

9904: Delay in response from AUA/ASA to UIDAI.

9904: Delayed Reply from AUA/ASA.

Abbreviations and Meanings

- Skey-Session key.
- PID–Personal Identity Data.
- CIDR–Central Identities Data Repository.
- UIDAI-Unique Identification Authority of India.
- ASA-Authentication Service Agency.
- AUA- Authentication User Agency

Apart from the above error codes the most common error response which is shown on machine is 3.1 in which case the Nodal Officer should check the internet connection. In case there is a server issue (meaning either at Box B or C) then downtime report is generated and is applicable to all the centers.

At no given time Manual Attendance is admissible under PMKVY except in case of server error issue when it is applicable to all training centers.