

NPCI/2023-24/NACH/002

May 04, 2023

To,

All NACH Member banks,

**Introduction to IQA validation on MMS mandates**

Mandate Management System (MMS) helps in the creation, amendment, and cancellation of mandates used for NACH debit transactions. In order to ensure better quality of images to facilitate processing, it has been decided to introduce Image Quality Assurance (IQA). Technical specifications for IQA validation are provided in Annexure I. The images that are not in compliance with the standards will be rejected by the system.

The validation will be implemented with effect from **July 01, 2023**

Member banks may please take note and disseminate the information herein to all the concerned. If any clarification is required you may please raise the same through CRM.

With warm regards,



Giridhar G.M

(Chief Offline Products Operations & Technology)

**Annexure 1:**

Following validations will be done for the images uploaded in Mandate process.

- **Image Size** – Image Size validation continues as we have in current system.
  - Max allowed size of front Image: 100000 bytes
  - Max allowed size of detail Front Image: 100000 bytes
- **Height** – Height of the image will be validated by MMS application, if Height of the image exceeds defined value then mandate will be rejected with reason “Image Height should be less than or Equal To Allowed Height”
  - Max allowed height of Images: 2000 Pixels
- **Width** – Width of the image will be validated by MMS application, if Width of the image exceeds defined value then mandate will be rejected with reason “Image Width should be less than or Equal To Allowed Width”.
  - Max allowed width of Images: 4000 Pixels
- **x\_resolution-** DPI values will be calculated for X resolution (Horizontal resolution). Image’s horizontal resolution should be between the defined value. If the DPI values of X resolution is not meet the criteria, it will reject with respective reason.
  - Reasons
    - Image X Resolution Should be less than or Equal To Allowed Value
    - Image X Resolution Should be more than or Equal To Allowed Value
  - Minimum X resolution of images: 60 DPIs
  - Maximum X resolution of images: 500 DPIs
- **y\_resolution-** DPI values will be calculated for Y resolution (Vertical resolution). Image’s vertical resolution should be between the defined value. If the DPI values of X resolution is not meet the criteria, it will reject with respective reason.
  - Reasons
    - Image Y Resolution Should be less than or Equal To Allowed Value
    - Image Y Resolution Should be more than or Equal To Allowed Value
  - Minimum Y resolution of images: 60 DPIs
  - Maximum Y resolution of images: 500 DPIs



- **Image type should be same as the extension** - tiff or jpeg application
- **Too light**- Brightness of image will be validated, If the Image Brightness is more than defined parameter value it will reject with "Image is Too Bright"
  - Maximum Luminance of image: 1.0 (Average of all the RGB values of pixels in the image)
- **Too dark** – Darkness of image will be validated, If the Image Darkness is more than defined parameter value it will reject with "Image is Too Dark".
  - Minimum Luminance of image: 0.6 (Average of all the RGB values of pixels in the image)

