

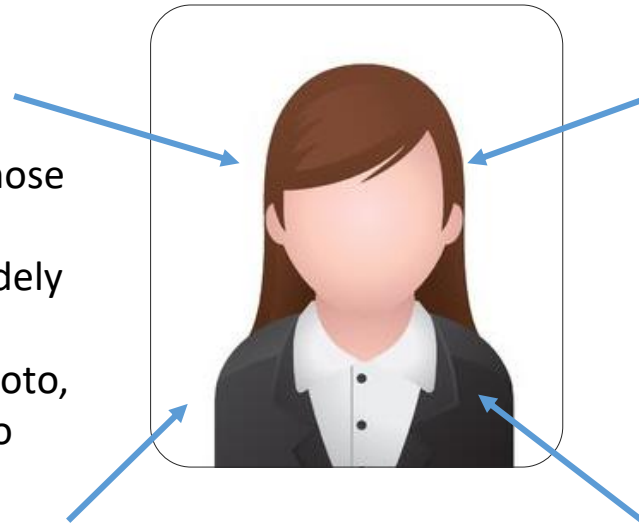
# Photo Specifications

For facial recognition enrolment

Pixel Resolution	Min. resolution: 320 x 240 Max. resolution: 640 x 480
Image Dimension	Similar to pixel resolution (i.e. 320 x 240, 640 x 480)
File Size	Not exceeding 2MB (Under 1MB preferred)

**ICAO** specifications (passport photo)  
is a good sample  
(ICAO: International Civil Aviation Organisation)

- Front view of user full face
- Hair should not cover eyes
- Both eyes should be open and visible
- Facial features (e.g. eye brows, eyes, nose and mouth) must be clearly visible
- Neutral expression (no wide smile, widely open mouth, tongue sticking out etc.)
- Face should be at the centre of the photo, and occupies around 75% of the photo



- Uniform color background (preferably neutral/white, with high contrast to subject)
- Background lighting not too bright

- Distance between eyes should be between 90-150 pixels
- Slight upward/download, left or right tilt of the head is acceptable, but the angle should not be too large
- Subject wearing spectacles should not have reflection on glasses concealing eyes
- No sunglasses
- No bandage, mask on face
- No blurriness in photo (no camera shake)
- No under/over exposure
- No unnatural colors
- No uneven lighting or shadows over face
- No radial distortion or fish-eye effect

User who normally wear mandatory gears due to needs (i.e. spectacles) or religious purpose is recommended to provide **two** photos (one with the gear and one without, if possible).