Requirements for digital face image (an electronically delivered photograph)

The general specification of photograph are defined in document Doc 9303 of the International Civil Aviation Organization (ICAO), an Agency' operating under the United Nations.

Photograph format



The dimensions of an electronically delivered photograph must **be not less than 424 x 560 pixels**. An electronically delivered photograph must be saved in **JPEG format** (not JPEG2000), the file extension can be either .jpg or .jpeg.

The photograph must not have JPEG artefacts caused by over-compression (compression artefacts, see figure).

Photography technical properties

Displayed facial image

The displayed facial image shall depict a true likeness of the rightful holder of the photograph and shall not be digitally altered or enhanced to change the subject's appearance in any way.

It shall have been taken within the **six months** preceding the application for document.

Pose

The photograph shall show a close up of the head and shoulders with the subject facing square on and looking directly at the camera with both eyes visible and with a neutral expression with the mouth closed.



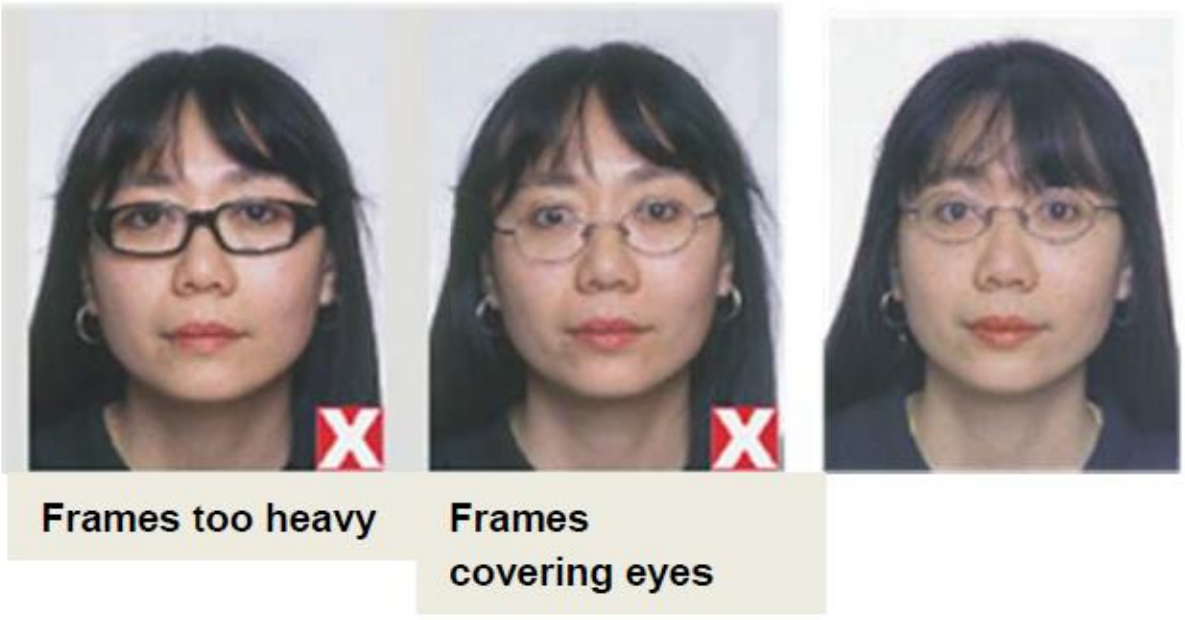
The pose should be such that an imaginary horizontal line drawn between the centres of the eyes is parallel to the top and bottom edges of the rectangular image.

The facial image shall be in focus from the crown (top of the head ignoring any hair) to the chin and from the nose to the ears.



If the additional detail of one ear is required (sometimes referred to as “half-on profile”), the face shall be at such an angle to the imaginary plane as to reveal the detail of the ear while maintaining full-face frontal details on that side of the face opposite to the exposed ear.
Both edges of the face must be clearly visible. The subject shall not be looking, portrait-style, over one shoulder.
The face shall be in sharp focus and clear with no blemishes such as ink marks or creases.
The eyes must be open, and there must be no hair obscuring them.

If the person wears glasses, the photograph must show the eyes clearly with no lights reflected in the glasses. The glasses shall not have tinted lenses. Avoid heavy frames if possible and ensure that the frames do not cover any part of the eyes. **Glasses should appear only if permanently worn.**





The person shall be without any headgear, except the case if the person daily wears a headgear due to religious reasons and the headgear does not cover the face or a part thereof.



Coverings, hair, headdress or facial ornamentation which obscure the face are not permitted.



Paintings and decorations of the face and head that make it difficult to recognize the person shall not be permissible.

There must be no other people or objects in the photograph.



Lighting, exposure and colour balance

Adequate and uniform illumination shall be used to capture the facial image ensuring there are no shadows or reflections on the face or in the background.



Shadows behind head



Shadow across face



The subject's eyes must not show red eye.



Flash reflection on face



Red eye



The photograph must have appropriate brightness and contrast.

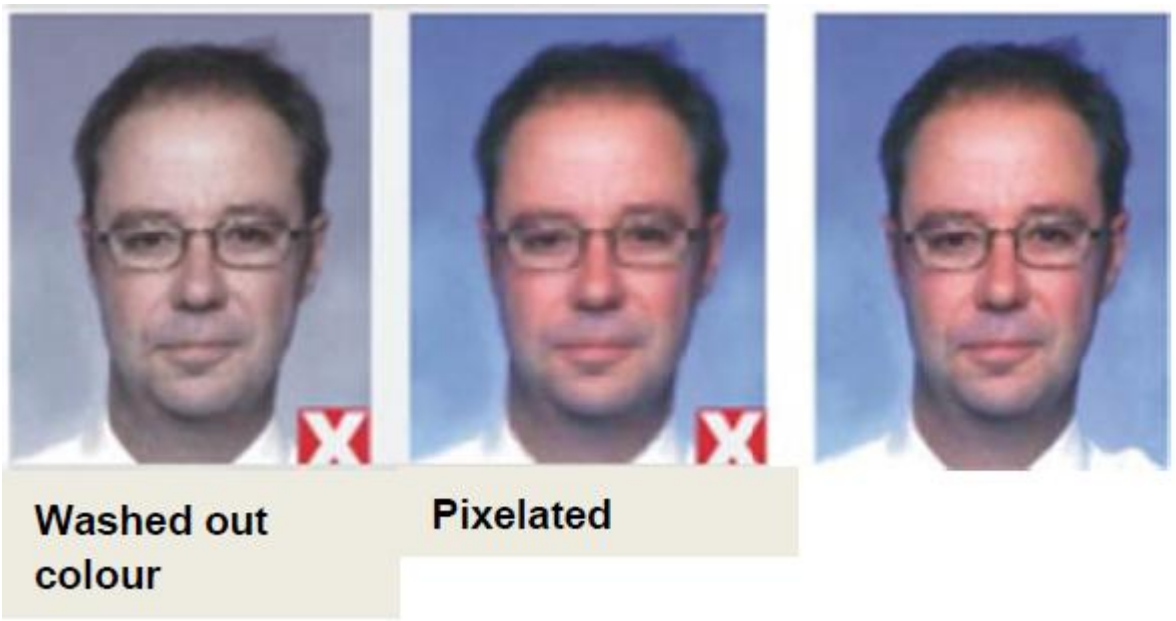


Too dark



Too light





The displayed portrait shall be a true-colour representation of the holder. The lighting and photographic process must be colour balanced to render skin tones faithfully.
A uniform white background shall be used to provide a contrast to the face and hair.

Digitally printed reproduction

Digital reproduction quality. The digital reproduction shall yield an accurate recognizable representation of the rightful holder of the document. The quality of the original captured photograph should at least be comparable to the minimum quality acceptable for photographs (resolution comparable to 6–8 dots per millimeter). To achieve this comparable image quality in a digital reproduction, careful attention must be given to the image capture, processing, digitization, compression and printing technology and the process used to produce the portrait, including the final preparation of the document.

Border. A border or frame shall not be used to outline a digitally printed reproduction.

Where the photograph is supplied to the Registry of Seamen in the form of a print, the photograph, whether produced using conventional photographic techniques or digital techniques, should be on photo-quality paper and should be of the maximum specified dimensions.
Submitted portraits should be 45.0 mm x 35.0 mm in dimension.

Compliance with international standards

The photograph shall comply with the appropriate definitions set out in [ISO/IEC 19794-5].