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JPEG fulfills the following requirements to guarantee further distribution and application.

- The JPEG implementation should be independent of image size.
- The JPEG implementation should be applicable to any image and pixel aspect ratio.
- Color representation itself should be independent of the special implementation.
- Image content may be of any complexity, with any statistical characteristics.
- The JPEG Standard Specification should be state of the art regarding the compression factor and achieved image quality.
- processing complexity must permit a software solution to run on as many available standard processors as possible.
- sequential decoding (line by line) and progressive decoding (refinement of the whole image) should be possible.

→ JPEG -

Since June 1982, WG8 (Working Group 8) of ISO (International Standard Organization) has been working on the Standardization of Compression and decompression for still images.

In June 1987, ten different techniques for still color and gray scaled images were presented. An adaptive transformation coding technique based on the DCT achieved the best (Subjective) results and therefore, was adopted for JPEG. JPEG is a joint project of ISO/IEC JTC1/SC2/WG10 and the Commission.

JPEG applies to color and gray scaled still images. A fast coding and decoding of still images is also used for video sequences known as Motion JPEG. The parts of JPEG are already available as software packages or together with specific hardware support.