**4 Terms and definitions**

NOTE Generally the terms and definitions of the base standards ISO 19106 and ISO 19131 apply to this profile as well. For a better understanding of this document, the main terms and definitions are repeated.

For the purposes of this document, the terms and definitions given in the TIFF and GeoTIFF specifications apply, in addition to the following:

**4.1 absolute accuracy (positional accuracy [ISO 19113])**

Closeness of coordinate value to the true or accepted value in a specified reference system (in this profile, the reference system is the World Geodetic System 1984 (WGS84))

**4.2 band (image component [ISO 12087-5]**

A well defined range of wavelengths, frequencies or energies of optical, electric or acoustic radiation. At the pixel level, a band is represented as one of the vector values of the pixel. At image level, band i of an image is the rectangular array of ith sample values from the pixel vectors.

**4.3 coordinate [ISO 19111]**

One of a sequence of numbers designating the position of a point in N-dimensional space

**4.4 coordinate reference system [ISO 19111]**

Coordinate system that is related to an object (of the real world) by a datum.

**TC211:** coordinate system that is related to an object by a datum

**4.5 coverage [ISO 19123]**

Feature that acts as a function to return values from its range for any direct position within its spatial,temporal, or spatiotemporal domain.

Examples include a digital image, raster map, and digital elevation matrix. Note: In other words, a coverage is a feature that has one or multiple value(s) for each attribute type, where each direct position within the geometric representation of the feature has a single value for each attribute type.

**4.6 coverage geometry [ISO 19123]**

Configuration of the domain of a coverage described in terms of coordinates.

**4.7 data compression**

Reducing the amount of storage space required to store a given amount of data, or reducing the length of message required to transfer a given amount of information. (data / image) compression: reduction in the number of bits used to represent source image data” [ISO 10918-1] (JPEG Part 1)

**4.8 dataset [ISO 19115]**

Identifiable collection of data.

**4.9 domain [ISO 19103]**

Well-defined set.

Note: Domains are used to define the domain set and range set of operators and functions.

**4.10 direct position [ISO 19107]**

Position described by a single set of coordinates within a coordinate reference system.

**4.11 evaluation <coverage> [ISO 19123]**

Determination of the values of a coverage at a direct position within the domain of the coverage.

**4.12 georectified grid**

Rectified grid wherein the external coordinate reference system is related to the real world by a datum.

Note: Any cell in the grid can be geolocated, given its grid coordinate, and the grid origin, cell spacing, and orientation.

**4.13 grid [ISO 19123], gridded data**

Network composed of two or more sets of curves in which the members of each set intersect the members of the other sets in a algorithmic way. DN:08-089 17 March 2014

**4.14 imagery [ISO 19101-2]**

Representation of phenomena as images produced electronically and/or optical techniques.

**4.15 metadata [ISO 19115]**

Data about data.

**4.16 mosaic**

For purposes of this profile, a mosaic image is an image composed of two or more separately collected (sensed) images. Additional XML metadata may be used to identify the cut-lines (boundaries and parameters for the images used to compose the mosaic.

**4.17 NULL value**

Value having no value or existence.

**4.18 orthorectified grid**

Georectified grid created using ground control points and elevation data where constant scale is maintained throughout the grid.

**4.19 pixel [ISO 19101-2]**

Smallest element of a digital image to which attributes are assigned

NOTE 1 This term originated as a contraction of “picture element”

NOTE 2 Related to the concept of a grid cell

The intensity of each pixel is variable; in color systems, each pixel has typically three or four dimensions of variability such as red, green and blue, or cyan, magenta, yellow and black.

**4.20 range <coverage> [ISO 19123]**

Set of feature attribute values associated by a function with the elements of the domain of a coverage.

**4.21 qualification layer**

A qualification layer is a coverage consisting of graphics information associated to geospatial data together with associated metadata (these metadata mostly identify the meaning of colour codes used in graphics).

**4.22 rectified grid [ISO 19123]**

Grid for which there is an affine transformation between the grid coordinates and the coordinates of an external coordinate reference system.

**4.23 referenceable grid [ISO 19123]**

Grid associated with a transformation that can be used to convert grid coordinate values to values of coordinates referenced to an external coordinate reference system

**4.24 relative accuracy / relative positional accuracy [ISO 19113]**

Evaluation of the random errors in determining the position of one point or feature with respect to another / closeness of coordinate difference value to the true or accepted value in a specified reference system

**4.25 tessellation / tiling [ISO 19123]**

Partitioning of a space into a set of conterminous subspaces having the same dimension as the space being partitioned

**4.26 transparency mask**

A Transparency Mask defines visible pixels of another image in the same TIFF file (that may be organised as an irregularly shaped region of visible pixels). The 1-bits define the visible pixels; the 0-bits define transparent pixels. (fdefinition based on TIFF specification)