

ICS

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iccMAX High Level Features

- **Spectral PCS to enable spectral communication of color information**
 - Illuminant and observer can be defined
- **Color appearance processing in the PCS**
 - Facility to store appearance attributes in a profile
- **Extended CMM functionality**
 - Support for spectral data
 - New Gamut Boundary Description
 - Encoding of BRDF parameters
 - New encoding of Named Colors to support tints
- **Hierarchical data encoding**
- **multiProcessElements with programmable transforms**
 - Functional operators, conditional evaluation and vectorized operations
- **Abbreviated profiles**
 - References to color encoding standard or to existing profile

iccMAX Color Spaces

- **Colorimetric Profile Connection Spaces**
 - Same as defined in ICC.1 (XYZ and L*a*b*)
 - Observer and Illuminant can vary as defined by spectral viewing conditions tag
- **New Extended Color Space Signatures Types**
 - Allow from 1 to 65535 channels to be defined
- **Device color spaces and color encodings**
 - Color space signatures as defined in ICC.1
 - Profiles can point to registered color space encodings and associated transform
 - Additional extended N-channel color space signatures defined
 - “ncxxxx” multi-channel color space with XXXX channels defined in header
- **Material Connection Spaces**
 - Additional tags define material connection channel names and default values
 - “mcXXXX” “material” values with XXXX channels defined in header

iccMAX Workflows

- **iccMAX workflows are defined by iccMAX Interoperability Conformance Specification (ICS) documents separate from iccMAX specification**
 - ICS documents define workflow specific requirements utilizing features of iccMAX specification
 - ICS documents will be registered with the ICC for defining various domain specific workflows
- **Not every feature of iccMAX specification needs to be implemented to support an iccMAX based workflow**
- **Allows for future iccMAX extensions**

ICS framework

Workflow

- Use case, workflow diagram, associated profile class/sub-classes

Profile (for each profile in the ICS)

- Domain, Class and sub-class

Header

- Required elements

Tags

- Listing of required tags/types (and optional tags)

Connections

- Colour space and profile class/sub-class that should be supported