

DSSI QUALITY CONTROL PROCEDURES AND GUIDELINES

DOCUMENT QUALITY CONTROL PURPOSE

The DSSI Quality Control process allows us to review images that have just been scanned and metadata that is captured. During this process, we will ensure that we have captured a quality, legible image and that the corresponding metadata used to identify the image is also correct. This step is critical to the success of any Document Management program, as it will enable knowledge workers to quickly access documents and ensure that those documents are legible.

The DSSI Quality Control process will achieve the following:

- ❖ Validate the scanning and indexing process
- ❖ Facilitate the re-scanning of poor quality images,
- ❖ Verify readability of each page of each document,
- ❖ Verify proper indexing of each document
- ❖ Verify accurate page counts for each document

TECHNOLOGY QUALITY CONTROL

Scanning quality control measures enable DSSI to ensure that the scanner is operating within anticipated tolerances established by ISO 12653, parts 1 and 2 (Electronic imaging). Following these procedures will enable the DSSI operator to ascertain that the scanner is properly set up before scanning actual documents.

DSSI uses post processing image enhancement to provide image "clean-up" after the scanning and prior to indexing. This process performs de-speckling, de-skewing, and other functions to improve the quality of the scanned image with limited operator intervention. DSSI only uses image enhancement tools to improve legibility.

DOCUMENT QUALITY CONTROL

DSSI will make sure that images are legible; all information was captured, no corners were cut-off, images are oriented correctly; images are straight and that problem areas of a document have been captured cleanly. Problem areas could include colored highlighting on a page; bleed through from the reverse side of the page, colored text that does not appear clearly, dot matrix print that is illegible, etc. The QC Operator will identify questionable images, compare these images to the original paper and determine if a rescan of the page, using image enhancement tools can produce a better image. Documents that will not benefit from a rescan do to the poor nature of the original paper will be placed on the "Problem Document Log" so that these documents can be identified when importing into an Electronic Document Management System.

DATA QUALITY CONTROL

Quality Control of Metadata is crucial to the success of any Document Management Program. This is why DSSI has implemented a process of "Blind Double Key Verification." This process allows a data entry operator to perform data entry of index values taken from the scanned image (This process can also be performed from physical documents such as a file tab). Once complete, the document is routed in the DSSI Imaging Workflow to a second data entry station where a second data entry operator will also perform data entry on the document. Operator #2 is unable to view the data entry results of Operator #1. Once the data entry is complete, Operator #2 will process the document. The metadata entered by each operator is compared within our capture software to locate any discrepancies. If the two entries match, then the document is processed within the Imaging workflow. If the two entries do not match, the document is then routed to the Project Manager to determine which entry is correct. The PM will select the correct entry and process the



document. This process eliminates 99.9% of potential data entry errors. It is beyond negligible to conceive that both data entry operators will commit the same error with the same keystroke on the same document.

INDUSTRY GUIDELINES AND STANDARDS

Image File Standards

- ❖ **ANSI/AIIM MS44-1988 (R1993)** providing procedures for the ongoing control of quality within an electronic image management system from input to output
- ❖ **ANSI/AIIM MS52-1991** standard describes the physical characteristics of original documents, which will facilitate scanning of the documents. It also identifies those characteristics that will make scanning difficult or impossible.
- ❖ **ANSI/AIIM MS53-1993** standard specifies a file format for the exchange of bi-level electronic images coded using CCITT recommendations for Group 4 TIFF.
- ❖ **ANSI/AIIM MS55-1994** standard for recommended Practice for the Identification and Indexing of Page Components (Zones) for Automated Processing in an Electronic Image Management Environment
- ❖ **ANSI/AIIM MS58-1996** standard to assist document scanner designers in devising a common implementation of the SCSI-2. This standard specifies the physical and logical implementation of ANSI X3.131-1994.
- ❖ **ANSI/AIIM MS60-1996** standard describes how to transit objects, attributes, and hierarchical relationships between Electronic Image Management Systems.
- ❖ **ANSI/AIIM MS61-1996** standard provides a common programming interface between device dependent software and document image scanners.
- ❖ **ISO 10196:2003**, Document imaging applications – Recommendations for the creation of original documents
- ❖ **ISO 12653-1:2000**, Electronic imaging – Test target for the black-and-white scanning of office documents – Part 1: Characteristics
- ❖ **ISO 12653-2:2000**, Electronic imaging – Test target for the black-and-white scanning of office documents – Part 2: Method of use

Digital Image Display and Output Standards/Guidelines

- ❖ **AIIM/TR19-1993** - Electronic Imaging Output/Display Devices.
- ❖ **AIIM/TR29-1993** - Electronic Imaging Output/Printers.

Legal Admissibility Standards

- ❖ **AIIM/TR31-1992 - Part 1:** Performance Guidelines for Admissibility of Records Produced by Information Technology Systems as Evidence.
- ❖ **AIIM/TR31-1993 - Part 2:** Performance Guidelines for the Legal Acceptance of Records Produced by Information Technology Systems for Regulatory Purposes.

Compact Disc Standards and Industry Guides

- ❖ **ISO/IEC 9660, 1988** - Information Processing - 120 mm (4.75-inch) Volume and File Structure of CD-ROM for Information Interchange.