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TECHNICAL CORRIGENDUM 3

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Information technology — Text and office systems — Document Printing Application (DPA) —

Part 1:
Abstract service definition and procedures

TECHNICAL CORRIGENDUM 3

Technologies de l'information — Bureautique — Application impression de documents (DPA) —

Partie 1: Définition de service abstrait et procédures

RECTIFICATIF TECHNIQUE 3

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Page 41

Subclause 8.1.1

Delete the following two lines from subclause 8.1.1:

From Management Information Model (ISO/IEC 10165-4)

AttributeId

ICS 35.240.20

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Page 44

Subclause 8.1.2

Insert new subclause 8.1.2.5 on page 44:

8.1.2.5   Requested-attributes

This attribute enables a client to specify a list of attributes that are to be returned from a DPA abstract-operation; the specified attributes will be included with the status attributes that are normally returned in the abstract-operation result. This is useful in those cases where a user needs information that is not normally returned by a particular server or abstract-operation.

Attributes that are specified in **requested-attributes**, but which are not supported by the server, or for which a value is not available, will be returned with an empty value.

If this attribute is not specified in the abstract-operation argument, the server will return the status attributes that are normally returned in the abstract-operation result. If this attribute is specified in the list-object-attributes-argument, it will be ignored.

```
requested-attributes ATTRIBUTE
        WITH ATTRIBUTE-SYNTAX AttributeId
        MATCHES FOR EQUALITY
        MULTI VALUE
        ::= id-att-requested-attributes
```

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Subclause 8.1.3

In the table in 8.1.3, replace the line:
```
    ub-octet-string          INTEGER ::= 255
```
with the line:
```
    ub-octet-string          INTEGER ::= 4095
```

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Subclause 9.1.5.9

Replace the heading line of 9.1.5.9:
```
    9.1.5.9. Delta time and deltaSyntax
```
with:
```
    9.1.5.9. DeltaTime and deltaTimeSyntax
```

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Subclause 9.1.5.51

Replace the first paragraph and syntax production:

Attribute value types that can specify a value as either a Cardinal or an OID (that normally names a Cardinal) employ this generic data type and syntax in this definition.

```
CardinalOrOid ::= CHOICE {
    cardinal-value    [0] Cardinal,
    oid-value         [1] OBJECT IDENTIFIER }
```

By:

Attribute value types that can specify a value as either an OID (that normally names a Cardinal or pair of Cardinals) or as a single Cardinal or pair of Cardinals employ this generic data type and syntax in this definition.

```
CardinalOrOid ::= CHOICE {
    cardinal-value    [0] Cardinal,
    oid-value         [1] OBJECT IDENTIFIER
    2-dimension-value  {
        first-value     [0] Cardinal
        second-value    [1] Cardinal  }  }
```

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Subclause 9.1.5.52

Replace the first paragraph and syntax production:

Attribute value types that can specify a value as a Cardinal and also have an OID that acts as alias for the Cardinal employ this generic data type and syntax in this definition.

```
OidCardinalMap ::= SEQUENCE {
        oid-name          [0] OBJECT IDENTIFIER OPTIONAL,
        cardinal-value    [1] Cardinal }
```

By:

Attribute value types that can specify a value as a Cardinal or pair of Cardinals and also have an OID that acts as alias for the Cardinal (or pair of Cardinals) employ this generic data type and syntax in this definition.

```
OidCardinalMap ::= SEQUENCE {
        oid-name          [0] OBJECT IDENTIFIER OPTIONAL,
        first-value       [1] Cardinal,
        second-value      [2] Cardinal  OPTIONAL }
```

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Subclause 9.2.1.2

Replace subclause 9.2.1.2 with the following:

9.2.1.2   Job-identifiers-on-printers

The **Job-identifiers-on-printers** attribute is intended to replace the earlier attribute **job-identifier-on-printer**, which is now deprecated. The new form of the attribute permits a job to be split across multiple printers, without losing the identity of the job on each separate printer. The earlier version of the attribute only provided for a single job-identifier to be passed, so if the job was split among multiple printers, the identities of the subjobs could be lost or ambiguous.

9.2.1.2.1 Job-identifiers-on-printers attribute

This attribute can contain a unique job-identifier for this job on each assigned printer or next server downstream, and it shall be assigned by that printer or server.

```
JobIdentifierOnPrinter  ::= SEQUENCE {
                                    printer-name   [0] SimpleName,
                                    job-identifier [1] JobIdentifier }

jobIdentifierOnPrinterSyntax  ATTRIBUTE-SYNTAX
     JobIdentifierOnPrinter
     MATCHES FOR EQUALITY  SET-COMPARISON  SET-INTERSECTION
     ::= id-syn-job-identifier-on-printer

job-identifiers-on-printers ATTRIBUTE
       WITH ATTRIBUTE-SYNTAX jobIdentifierOnPrinterSyntax
       MULTI VALUE
     ::= id-att-job-identifiers-on-printers
```

The value of the **job-identifiers-on-printers** attribute shall contain the job-identifier that the printer or the next server downstream generates at the time the server submits the job to the printer or the next server downstream. If the printer or the next server downstream does not generate its own job identifier, the server shall leave the job-identifier value unspecified (i.e., the job-identifier element shall contain a null string).

If the job is split among two or more printers, the value of **job-identifiers-on-printers** shall contain a job-identifier for each of the assigned printers. If a printer does not generate its own job identifier, the server shall place a null string in place of a job-identifier for that printer.

   NOTE – This attribute is intended for jobs submitted to other servers, such as a gateway to a legacy server, or to
   printers which have their own internal queue and assign their own job identifiers.

9.2.1.2.2 Job-identifier-on-printer attribute [Deprecated]

[Temporary Note: This attribute is now deprecated, but should be supported for a limited time to enable interoperability with older DPA client and server implementations.]

This attribute provides the job-identifier for this job to uniquely identify it on the printer or next server downstream, and it shall be assigned by that printer or server.

```
job-identifier-on-printer ATTRIBUTE
        WITH ATTRIBUTE-SYNTAX jobIdentifierSyntax
        SINGLE VALUE
        ::= id-att-job-identifier-on-printer
```

The value of the **job-identifier-on-printer** attribute shall be the job-identifier that the printer or the next server downstream generates at the time the server submits the job to the printer or the next server downstream. If the printer or the next server downstream does not generate its own job identifier, the server shall leave the value of this attribute unspecified.

> NOTE – This attribute is intended for jobs submitted to other servers, such as a gateway to a legacy server, or to printers which have their own internal queue and assign their own job identifiers.

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Subclause 9.2.4.12

Replace the second entry:

submit-only	id-val-job-validate-submit-only	Server to determine whether or not the job would be completed without errors or warnings; no printing is requested

with the following table entries:

submit-only	id-val-job-validate-submit-only	Server to determine whether or not the job would be completed; print request parameters are to be checked but not the print datastream; no printing is requested
validate-datastream	id-val-job-validate-datastream	Server to determine whether or not the job would be completed; print datastream is to be checked but not the print request parameters; no printing is requested
validate-both	id-val-job-validate-both	Server to determine whether or not the job would be completed; both the print request parameters and the print datastream are to be checked; no printing is requested

Page 125

Subclause 9.2.8.1

Revise the first sentence to read:

> This attribute identifies the current state of the job (pending, processing, held, etc.).

Page 126

Revise the table entry for "printing" as follows (using strikeout character formatting as shown):

printing	id-val-job-state-printing	The server has completed processing the job and the output device is currently printing the job on at least one printer. That is, a print engine is either printing pages of the job, or failing in its attempt to print pages of the job because of some wait state, such as, start-wait, end-wait, needs-attention, etc. The complete job state includes the detailed status represented in the printers' printer-state attribute(s). NOTE - a system may not always be able to determine when a job is actually being printed; therefore, printing is considered a substate of the processing state, and implementation of the printing substate is optional.

Revise the table entry for "paused" to read as follows:

paused	id-val-job-state-paused	The job has been paused as a result of a PauseJob operation, or a printer failure has caused the server to pause the job until an operator can deal with the problem.

Page 128
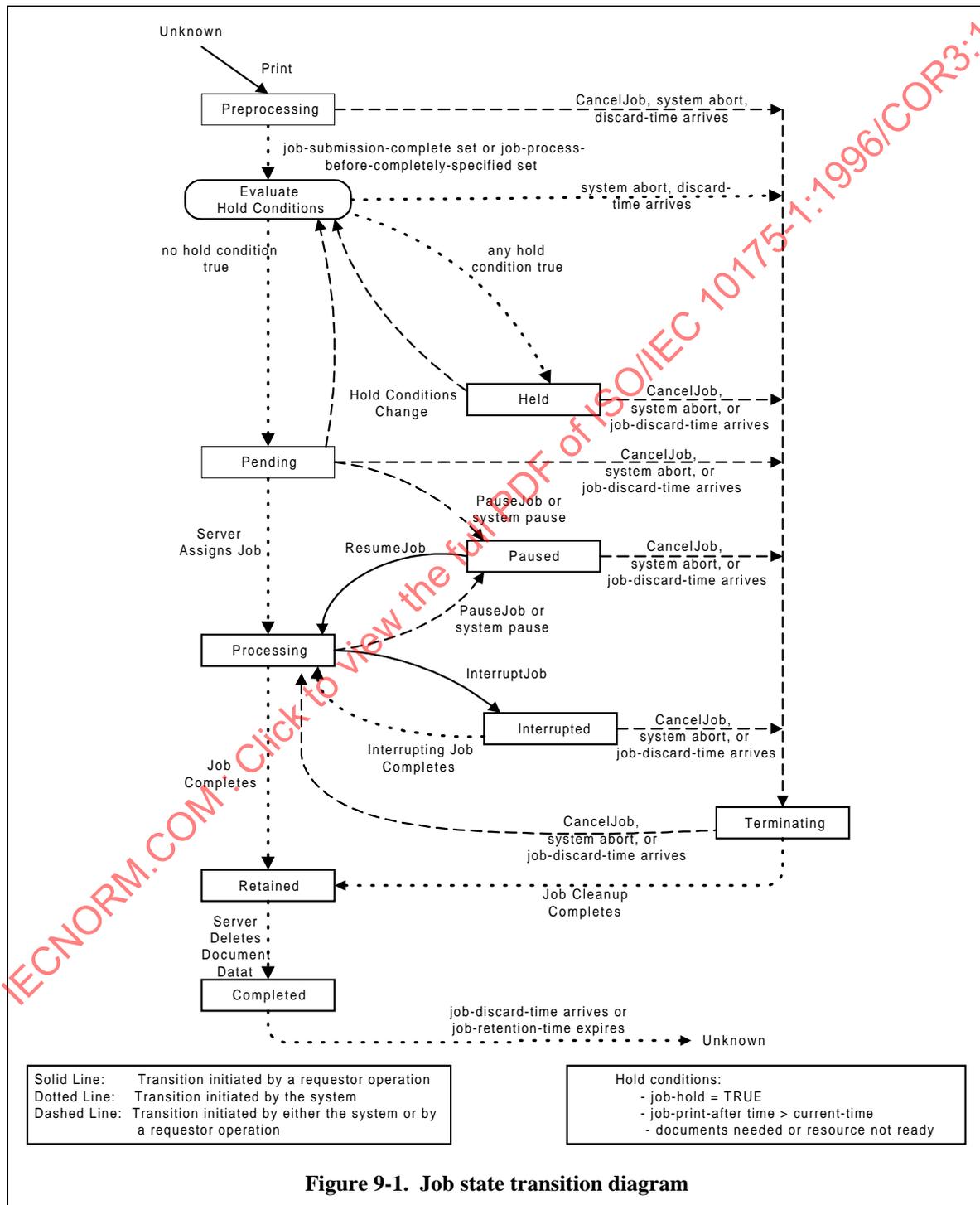
Replace Figure 9-1 on page 128 with the following figure:

Figure 9-1. Job state transition diagram

Page 135

Subclause 9.2.8.18

Replace the line:

WITH ATTRIBUTE-SYNTAX JobIdentifierSyntax

with the line:

WITH ATTRIBUTE-SYNTAX newJobIdentifierSyntax

Page 138

Subclause 9.2.8

On page 138, preceding subclause 9.2.9, insert the new subclause 9.2.8.30:

9.2.8.30 Job-state-message

Attribute values of this type shall contain human readable text information about a job's state. This message is used primarily when a job has been completed with errors or has been aborted.

```
job-state-message ATTRIBUTE
      WITH ATTRIBUTE-SYNTAX errorMessageSyntax
      SINGLE VALUE
      ::= id-att-job-state-message
```

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Subclause 9.3.2.8

Replace the first paragraph with the following text:

This attribute identifies a resolution that the server shall use as the resolution default for (the pages of) the document where the document itself does not specify a resolution. The resolution may be specified either by one or two integer values in dots per inch (dpi), or it may name a resolution with an OID. When two integers are specified, the **first-value** represents the resolution across the feed direction of the printer, while the **second-value** represents the resolution along the feed direction.

Page 166

Subclause 9.3.2.22

Replace the text after the syntax production with the following:

A value of **1** for **copy-count** shall generate a single human perceptible copy of the electronic document. If a value of **0** is supplied, then no print output shall be produced. This is useful when resubmitting a multi-document job if one or more documents are to be omitted from the job output.

Pages 184-185

Subclause 9.4.8

In 9.4.8, just before the final paragraph, add the following paragraph:

Some printers may support resolutions that are not *square*, i.e., the values are different along the printer's two principal axes. In this case, both cardinal values are given; the **first-value** represents the resolution across the feed direction of the printer, and the **second-value** represents the resolution along the feed direction.

Page 220

Subclause 9.6.4

At the end of 9.6.4, on page 220, insert the following note:

NOTE - this attribute is now deprecated because the medium-type values defined do not form an orthogonal list; i.e., a particular type of medium may possess more than one of the defined medium-type values. The multi-valued attribute named **medium-properties** should be implemented instead of the **medium-type** attribute. However, the medium-type values defined in this clause may be used with the new attribute **medium-properties**.

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Page 226

Subclause 9.6

*Create and insert a new subclause to define the **medium-properties** attribute:*

9.6.19   Medium-properties

This attribute identifies the type of this medium. (e.g. stationery, envelope, transparency, etc.)

```
medium-properties ATTRIBUTE
        WITH ATTRIBUTE-SYNTAX objectIdentifierSyntax
        MATCHES FOR  EQUALITY  SET-COMPARISON
        MULTI VALUE
        ::= id-att-medium-properties
```

Standard values for this attribute are defined in 9.6.4.

NOTE - this attribute should be used instead of the attribute **medium-type** which is now deprecated.

Page 269

Subclause 9.17

Replace the last sentence of clause 9.17 paragraph 1:

Attributes listed in section 9.2.6 (Access and Accounting) and 9.2.8 (Job-status) are not valid attributes for an initial-value-job object.

with the sentence:

Attributes listed in 9.2.8 (Job-status) are not valid attributes for an initial-value-job object.

Page 270

Subclause 9.18

Replace the second sentence of clause 9.18, paragraph 1:

All attributes listed in clause 9.3.1, 9.3.2 (except **initial-value-document**), 9.3.3 (except document-content and **transfer-method**), and 9.3.4 are valid attributes for an initial-value-job object.

with the sentence:

All attributes listed in clause 9.3.1, 9.3.2 (except **initial-value-document**), 9.3.3 (except **document-content**), and 9.3.4 are valid attributes for an initial-value-document object; however, note that not all possible values of these attributes are valid in an initial-value-document.

Page 282

Annex A

Following the entry for id-syn-ignored-attribute, assign a new OID value to the new attribute syntax:

```
id-syn-job-identifier-on-printer      ID ::= { id-syn  64 }
```

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Following the entry:
```
id-att-default-delivery-addresses     ID ::= { id-oc-operation  3 }
```
assign the new attribute OID to the operation class:
```
id-att-requested-attributes           ID ::= { id-oc-operation  6 }
```

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Following the entry for id-att-current-page-order, assign new OID values as follows:

```
id-att-job-identifiers-on-printers            ID ::= { id-oc-job  245 }

id-att-job-state-message                      ID ::=  { id-oc-job  246 }
```

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Page 292

At the end of the list of medium object attributes, add the following attribute identifier definition:

```
id-att-medium-properties              ID ::=  { id-oc-medium  25 }
```

Page 301

Following the entry:
```
id-val-job-validate-submit-only     ID ::=  { id-vc-job-validate  1 }
```
assign the two new OIDs to the job-validate class:
```
id-val-job-validate-datastream      ID ::=  { id-vc-job-validate  2 }
id-val-job-validate-both            ID ::=  { id-vc-job-validate  3 }
```

Pages 336 and 341

Annex C

Insert the OIDs into the list of imports, in alphabetical order:

```
id-att-job-identifiers-on-printers,
        . . .
id-syn-job-identifier-on-printer,
```

Page 337

Insert the attribute identifier **id-att-medium-properties** *into the list of imports following the identifier* **id-att-medium-identifier**.

Page 339

Insert the attribute-identifier into the list of imports, in the proper alphabetical order:

```
id-att-requested-attributes,
```

Page 341

Following the line:

```
id-syn-job-password,
```

insert the OID import line:

```
id-att-job-state-message,
```

Page 345

Replace the line:
```
--*** 9.1.5.9. Delta time and deltaSyntax
```
with:
```
--*** 9.1.5.9. DeltaTime and deltaTimeSyntax
```

Pages 352-353

Replace the definition of the **CardinalOrOid** *datatype with the following:*

```
CardinalOrOid ::= CHOICE {
      cardinal-value    [0] Cardinal,
      oid-value         [1] OBJECT IDENTIFIER
      2-dimension-value  {
          first-value     [0] Cardinal
          second-value    [1] Cardinal  }  }
```