This is an English translation of the Executive Order on Submission Information Packages (*Bekendtgørelse om arkiveringsversioner*). In the event of a conflict between the Danish version and the English translation, the Danish version shall supersede.

Executive Order on Submission Information Packages

Pursuant to Sections 5(1), 13(1) and 14 of Executive Order no. 591 of 26 June 2003 on public archives and the activities of public archives and following consultation with the municipal and regional parties, the following is stipulated:

Scope

1. The provisions of this Executive Order shall apply to records created by the public administration and the courts and determined by the State Archives to be worthy of preservation.

2.-(1) Data from IT systems and audio and video shall be submitted in the form of submission information packages.
(2) For preservation reasons, the State Archives may determine that other records shall also be submitted in the form of submission information packages.

3.-(1) A submission information package of data worthy of preservation shall be produced in accordance with the instructions issued by the national archivist, cf. Schedules 2-8.
(2) If necessary in the interest of preservation, the national archivist may specify a preservation form other than a submission information package produced in accordance with the instructions set out in Schedules 2-8.

Production and submission

4. The deadlines for the production and submission of submission information packages of data from the state administration and the courts' IT systems shall be fixed by the State Archives.

5.-(1) Submission information packages of data from the IT systems of the municipal and regional authorities containing personal data shall be produced and submitted before data is deleted. The individual municipal or regional authority may make agreements on earlier deadlines with the receiving archive.
(2) The production of submission information packages of data from other IT systems shall take place before data is deleted or when the IT system is decommissioned.
(3) In addition, the State Archives may decide that a submission information package of data from an IT system must be produced when this is required in the interest of preservation.

6.-(1) Submission information packages of state authorities' data shall be approved by the State Archives. Submission information packages of municipal and regional authorities' data shall be approved by the receiving archive. Submission information packages of municipal and regional data worthy of preservation shall be approved by the same public archives which receive the authorities' submission information packages that are subject to a submission obligation.

(2) Data transferred to a submission information package shall not be deleted by the authorities before the submission information package has been approved.

Commencement etc.

7.-(1) This Executive Order shall enter into force on 1 September 2010.

(2) Executive Order no. 342 of 11 March 2004 on submission information packages of data from electronic archive systems deemed worthy of preservation shall be revoked.

(3) Executive Order no. 302 of 16 April 2009 on the submission of audio and video shall be revoked.

(4) Up to and including 1 July 2011, an agreement can be made with public archives on submission information packages of data being prepared in accordance with the rules set out in the executive order mentioned in Subsection 2.

(5) Submission information packages of data in accordance with the rules set out in the executive order mentioned in Subsection 2 shall be submitted to the relevant public archives before 31 December 2011.

(6) Upon application, the national archivist may grant an exemption from the rules set out in Subsections 4 and 5.

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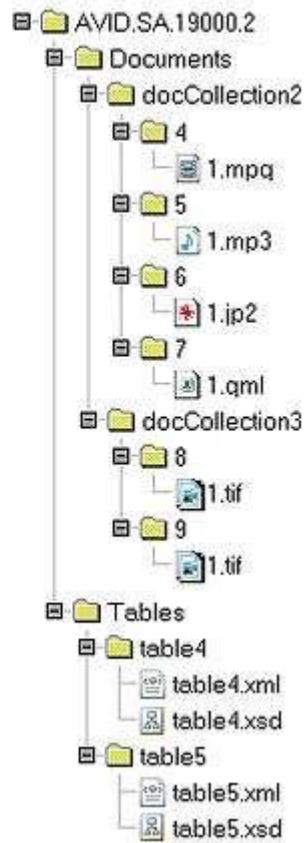Schedule 6 Information on the submission information package
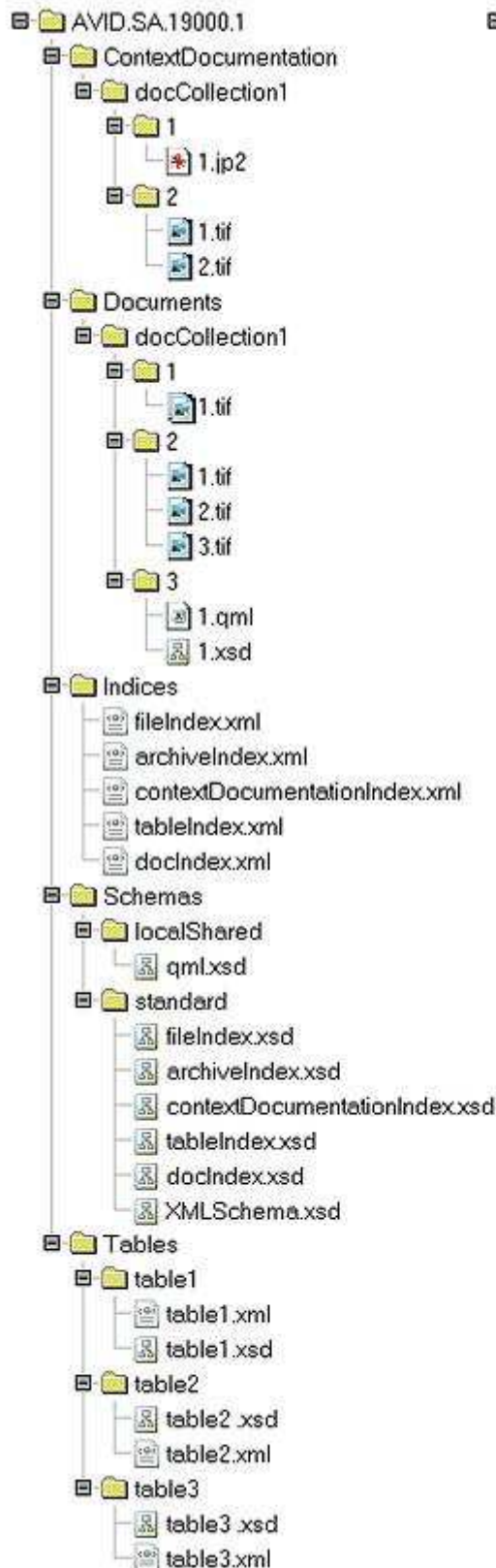   6.A. Archive description file
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Schedule 8 Forms

Graphical overview of elements and structure in a submission information package

Figure 2.1

- AVID.SA.19000.1
  - ContextDocumentation
    - docCollection1
      - 1
        - 1.jp2
      - 2
        - 1.tif
        - 2.tif
  - Documents
    - docCollection1
      - 1
        - 1.tif
      - 2
        - 1.tif
        - 2.tif
        - 3.tif
      - 3
        - 1.qml
        - 1.xsd
  - Indices
    - fileIndex.xml
    - archiveIndex.xml
    - contextDocumentationIndex.xml
    - tableIndex.xml
    - docIndex.xml
  - Schemas
    - localShared
      - qml.xsd
    - standard
      - fileIndex.xsd
      - archiveIndex.xsd
      - contextDocumentationIndex.xsd
      - tableIndex.xsd
      - docIndex.xsd
      - XMLSchema.xsd
  - Tables
    - table1
      - table1.xml
      - table1.xsd
    - table2
      - table2.xsd
      - table2.xml
    - table3
      - table3.xsd
      - table3.xml

- AVID.SA.19000.2
  - Documents
    - docCollection2
      - 4
        - 1.mpg
      - 5
        - 1.mp3
      - 6
        - 1.jp2
      - 7
        - 1.qml
    - docCollection3
      - 8
        - 1.tif
      - 9
        - 1.tif
  - Tables
    - table4
      - table4.xml
      - table4.xsd
    - table5
      - table5.xml
      - table5.xsd

Submission information package of data and any documents in the IT system

3.A. General rules on submission information packages

3.A.1 A submission information package consists of:
– data structure, cf. 3.B
– data content, cf. 3.C
– information on the submission information package, cf. 3.D

3.A.2 A submission information package must not contain encrypted information.

3.A.3 A submission information package must contain all data worthy of preservation and any documents from a defined period of time during which data are no longer corrected or added or must be in the form of a 'snapshot' containing all data worthy of preservation and any documents from a specific time.

3.A.4 If the submission information package of an IT system with documents is prepared without changing the archive period, of if, in connection with a change of archive periods, documents are transferred to a new period, the documents included in the submission information package must be marked in the IT system to enable exclusion from subsequent submission information packages.

3.B. Data structure

3.B.1 The data structure in the submission information package consists of:
– a folder structure, cf. 4.B, illustrated in Figure 2.1
– a relational database structure on the first normal form or higher, specified in the index file tableIndex.xml, cf. 4.C.5.a
– other XML index files, cf. 4.C, structuring data on the general content of the submission information package, all files in the submission information package, its context documentation and any digital documents

3.C. Data content

3.C.1 The data content consists of:
– table content in standardised data types, cf. 5.B
– any digital documents, audio, video and geodata in standardised data formats, cf. 5.E - 5.G

3.D. Information on the submission information package

3.D.1 Information on the submission information package consists of descriptions of administrative use, data content and IT system, cf. Schedule 6.

Data structure

4.A. General rules on data structure

4.A.1 All keys in a submission information package must have a unique identifier. Situations where it is necessary to extract parts of keys fields to understand the content or function of the IT system must be avoided.

4.A.2 When the value of a field is a code representing a fixed and unique value, the codes must be explained. If the value is not specified in a code or look-up table in the IT system, one or more tables must be generated in the submission information package indicating the values of the code fields. Alternatively, the code value in table data must be replaced by the actual content when extracting data for the submission information package.

4.A.3 If the documents in an IT system with documents are stored using a significant structure, such structure must be converted to one or more tables in the submission information package.

4.B. Location of folders and files

4.B.1 In the root of the file system on the submission medium, cf. Schedule 7, a folder with the medium name must be placed. The medium name consists of the unique submission information package ID with a suffix ».n« added, indicating the order of the media, where n is a consecutive media serial number starting with 1.

4.B.2 The content of the submission information package is placed in folders as specified in Figure 4.1.

Figure 4.1

Folder name	Description	Compulsory	Location
Indices	Index files, cf. 4.C	Yes	Always on the first medium
Tables	Table content, cf. 4.D	Yes	Optional location, may be distributed on several media
ContextDocumentation	Context documentation, cf. 4.E	Yes	Always on the first medium
Schemas	XML schemas, cf. 4.F. **Fejl! Henvisningskilde ikke fundet.**The schema folder must have two subfolders: *standard* and *localShared*	Yes	Always on the first medium
Documents	Any documents, audio, video and geodata, cf. 4.G	No	Optional location, may be distributed on several media

4.B.3 The folders must be named as specified in Figure 4.1.

4.B.4.a A submission information package ID consists of the prefix AVID, a 2-4 letter code indicating the receiving archive and a submission information package serial number. The elements are separated by dots.

4.B.4.b The submission information package ID is provided by the State Archives.

4.B.5.a If a submission information package is too large for one medium, cf. Schedule 7, it may be distributed on several media.

4.B.5.b The folders *ContextDocumentation*, *Indices* and *Schemas* must always be on the first medium submitted.

4.B.5.c The folder in the root of subsequent media must only contain the folders with content that must be distributed on several media. Such folders must always be named as described in Figure 4.1, without a suffix.

4.B.6 Each medium must only contain one of each of the folders specified in Figure 4.1.

4.C. *Indices* folder

4.C.1.a The *Indices* folder must contain the following index files with information on the submission information package and its content:
– fileIndex.xml
– archiveIndex.xml
– contextDocumentationIndex.xml
– tableIndex.xml

4.C.1.b If the submission information package contains digital documents, audio, video or geodata, the *Indices* folder must also contain the following index file:
– docIndex.xml

4.C.1.c All index files must observe the relevant schema, cf. Schedule 8.

4.C.2.a **fileIndex.xml** must contain a complete list of all files in the submission information package. However, fileIndex.xml is exempt from this rule.

4.C.2.b The information shown in Figure 4.2 must be specified for each file in the submission information package.

Figure 4.2

Element name	Designation	Description	Prevalence per file	Comp ulsory
foN	Path	Specification of a path to the submission information package folder containing the file	1	Yes
fiN	Name	File name	1	Yes
md5	Check sum	The check sum of the file of the type MD5 according to *IETF RFC1321 – The MD5 Message-Digest Algorithm*: 128 bit (16 bytes) represented as 32 hexadecimal digits, all in *either* lower-case letters *or* capital	1	Yes

		letters (lower or upper case). The requirement for 32 hexadecimal digits means that prefixed zeros are required, depending on the value.		

4.C.3 **archiveIndex.xml** must contain the information appearing in 6.A.

4.C.4.a **contextDocumentationIndex.xml** must contain an index of the documents in the context documentation of the submission information package.

4.C.4.b The information shown in Figure 4.3 must be specified for each document in the context documentation.

Figure 4.3

Element name	Designation	Event space	Prevalence per document	Compulsory
documentID	Document ID	ID of up to 12 digits	1	Yes
documentTitle	Document title	Free text	1	Yes
documentDescription	Document description	Free text	0-1	No
documentDate	Date	Year, year-month, year-month-day according to the XML standard	0-1	No
authorName	Author name	Free text	0-m	No
authorInstitution	Author institution	Free text	0-m	No
documentCategory	Document category	Category according to Schedule 6, Figure 6.2	1-m	Yes

4.C.5.a **tableIndex.xml** must contain a specification of a relational database structure on the first normal form or higher. All tables in the submission information package must be specified.

4.C.5.b »tableIndex.xml« must observe the general XML schema »tableIndex.xsd«, cf. 4.F.

4.C.5.c If a field can have the value NULL, tableIndex.xml must contain the value true for the column's appurtenant element nullable.

4.C.6.a **docIndex.xml** must be the link between each document and its location. In addition, »docIndex.xml« must contain information on the original file names of the document, file type in the submission information package and any parent documents. »docIndex.xml« must not contain information on the documents in the context documentation.

4.C.6.b The information shown in Figure 4.4 must be specified for each document in docIndex.xml.

Figure 4.4

Element name	Designation	Description	Event space	Prevalence per document	Compulsory
dID	DocID	Unique ID identifying a document	ID of up to 12 digits	1	Yes
pID	Parent	ID of parent document	DocID	0-1	No
mID	MediaID	Name of the medium on which the document is stored	Cf. 4.B.1	1	Yes
dCf	SubFolder	Document collection folder in which the document is placed	Cf. 4.G	1	Yes
oFn	OrigFilename	Specification of the file name (incl. extension) in the IT system	Free text	1	Yes
aFt	ArchivalFormat	Specification of file format in the submission information package	Extension, cf. 4.G.8	1	Yes
gmlXsd	Schema	For GML files, reference is made to the schema to be used for validation of the relevant GML file	Free text	0-1	No

4.D. *Tables* **folder**

4.D.1 The *Tables* folder must contain one folder for each table in the submission information package.

4.D.2.a The folder for a table must be named »table[consecutive number]«.

4.D.2.b The consecutive numbering starts with 1. Prefixed zeros are not allowed.

4.D.3 The folder for each table must contain two files:

– table[consecutive number].xsd
– table[consecutive number].xml

4.D.4 »table[consecutive number].xsd« is an XML schema which only indicates the structure of the individual table and must be in agreement with the XML instance »tableIndex.xml«, cf. 4.C.5.a, which contains the structure of the entire relational database, including all tables.

4.D.5 »table[consecutive number].xml« is an XML instance containing data for the table in question, and its structure must be in agreement with the related XML schema, »table[consecutive number].xsd«.

4.D.6 If a field in a table can have the value NULL, the relevant column in the related schema (»table[consecutive number].xsd«) must contain the attribute nillable=»true«. Similarly, the XML instance (»table[consecutive number].xml«) element must contain the attribute xsi:nil=»true«, cf. the W3C standard for handling NULL values in XML.

4.E. *ContextDocumentation* **folder**

4.E.1 The *ContextDocumentation* folder must contain one or more document collection folders with context documentation, cf. 6.B.

4.E.2 A document collection folder with context documentation can contain up to 10,000 document folders.

4.E.3 The document collection folders must be named »docCollection[consecutive number]«, starting with 1. The name must be unique within *ContextDocumentation.*

4.E.4 Each document in the context documentation must be given an ID of up to 12 digits. The document ID must be unique within *ContextDocumentation.*

4.E.5 A document folder must contain one document consisting of one or more files in the same format and be named with the document ID. Prefixed zeros are not allowed.

4.E.6 A document file (or files) must be named consecutively with a number, starting with 1, and the format extension, cf. 4.G.8.

4.F. *Schemas* **folder**

4.F.1 The *Schemas* folder must be divided into the subfolders *standard* and *localShared.*

4.F.2 The *standard* folder must contain schemas for the index files of the submission information package, cf. Schedule 8, and W3C standard for XML schema, cf. http://www.w3.org/2001/XMLSchema.xsd.

4.F.3 As concerns the schemas fileIndex.xsd, archiveIndex.xsd, contextDocumentationIndex.xsd, tableIndex.xsd, docIndex.xsd and W3C's standard XML schema, the schemas provided by the State Archives must always be used. The schemas and their naming must not be changed in the submission information package.

4.F.4 The *localShared* folder must contain any GML schemas not placed with the relevant GML document, cf. 4.G.7.a.

4.G. *Documents* **folder**

4.G.1 The *Documents* folder must contain one or more document collection folders; however, a maximum of 10,000.

4.E.3 The document collection folders must be named »docCollection[consecutive number]«, starting with 1. The name must be unique within *Documents.*

4.G.3 A document collection folder can contain up to 10,000 document folders.

4.G.4 Each document in the submission information package must be given an ID of up to 12 digits. The document ID must be unique within *Documents.*

4.G.5 A document folder must contain one document consisting of one or more files in the same format and be named with the document ID. Prefixed zeros are not allowed.

4.G.6 A document file (or files) must be named consecutively with a number, starting with 1, and the format extension. Prefixed zeros are not allowed.

4.G.7 For GML files, the relevant schema must be stored in the same folder as the GML file and be named with a consecutive number followed by .xsd, cf., however, 4.G.7.a. Prefixed zeros are not allowed.

4.G.7.a Alternatively, GML schemas may be stored in the schema folder named *localShared*, cf. 4.F. GML schemas in the *localShared* folder are named »localSchema[consecutive number]«, starting with 1.

4.G.8 Use of extensions

4.G.8.a Documents in the TIFF format must be given the extension tif.

4.G.8.b Documents in the MP3 format must be given the extension mp3.

4.G.8.c Documents in the MPEG-2 and MPEG-4 formats must be given the extension mpg.

4.G.8.d Documents in the JPEG-2000 format must be given the extension jp2.

4.G.8.e Documents in the GML format must be given the extension gml.

4.G.8.f Documents in the WAVE format must be given the extension wav.

4.G.9 The option of retrieving documents pertaining to the same case must be transferred to the submission information package in accordance with the instructions provided by the receiving archive.

Data content

The data content of the system information package consists of table content in standardised data types and of any digital documents, audio, video and geodata in standardised formats.

5.A. Table content

5.A.1.a In accordance with the table structure defined for each table in each accompanying XML schema, named »table[consecutive number].xsd«, cf. 4D, each table must be contained in an XML instance named »table[consecutive number].xml«.

5.A.1.b The consecutive numbering starts with 1. Prefixed zeros are not allowed.

5.A.2 The content of the individual fields must be cleared of any prefixed and suffixed blank characters.

5.B. Data types

5.B.1.a The standardised data types to be used for table content are specified in Figure 5.1. They represent an extract of the SQL:1999 standard represented as data types in W3C XML Schema Language 1.0.

5.B.1.b The W3C XML Schema Language 1.0 data type must be used.

The translation from SQL:1999 data types has been listed to show how the translation to data types in W3C XML Schema Language 1.0 must be carried out.

Figure 5.1

Data type	SQL:1999	XML data type
Text	CHAR, CHARACTER, NCHAR, NATIONAL CHAR, NATIONAL CHARACTER, VARCHAR, CHARACTER VARYING, NATIONAL CHARACTER VARYING	string
Integer	INTEGER, SMALL INTEGER	integer
Decimal	NUMERIC, DECIMAL, FLOAT, DOUBLE PRECISION, REAL	decimal
Boolean	BOOLEAN	boolean
Hexadecimal	CHAR, CHARACTER, NCHAR, NATIONAL CHAR, NATIONAL CHARACTER, VARCHAR, CHARACTER VARYING, NATIONAL CHARACTER VARYING	hexBinary
Date	DATE	date
Time	TIME[WITH TIME ZONE]	time
Time stamp	TIMESTAMP[WITH TIME ZONE]	dateTime
Time period	INTERVAL	duration

5.B.2 The *string* data type may only contain non-marked-up text which may be interpreted directly.

5.B.3 According to W3C, the *boolean* data type may only have the values 1; 0 or *true*; *false*.

5.B.4 The *date, time* and *dateTime* data types may be used with or without *Time Zone*.

5.C. Conversion of table content to digital documents, audio, video or geodata

5.C.1 Table content must comply with the data types listed, cf. 5.B. This means that data content in table form from an IT system which is to be transferred to a submission information package and which cannot immediately meet this requirement must be converted as follows:

5.C.1.a to digital documents, audio, video or geodata, with the content being converted to the formats shown in 5.E - 5.G.

5.C.1.b to table content of the *string* data type, cf. 5.B, with all content other than that allowed for the data type being deleted.

5.C.2 The receiving archive indicates whether a given content should be handled according to 5.C.1.a or 5.C.1.b.

5.D. Text format

5.D.1 Unicode encoding

5.D.1.a Data in the index files and table content of the submission information package must be encoded as *well-formed* UTF-8, as provided in ISO/IEC 10646:2003 Annex D, and as described in *The Unicode Standard 5.1,* Chapter 3.

5.D.1.b The encoded characters must be valid Unicode scale values. Surrogates/RC elements and Unicode *noncharacters* may not be used.

5.D.1.c No characters in *Private Use Area* may be encoded.

5.D.1.d The control code characters from and including #x00 to and including #x1F are not allowed with the exception of the control code characters tabulator (TAB) #x09, new line (LF) #x0A and return (CR) #x0D.

5.D.2 XML encoding

5.D.2.a According to the XML standard, the rules applying to the representation of the characters in question are listed in figure 5.2.

Figure 5.2

Char.	Entity	Use
<	<	Compulsory
>	>	Recommended
&	&	Compulsory
'	'	Recommended
"	"	Recommended

5.D.2.b The characters from and including #x7F to and including #x9F must be specified with their decimal or hexadecimal character reference.

5.D.2.c CDATA sections <![CDATA]]> may not be used.

5.E. Digital documents

5.E.1.a A digital document, cf., however, 5.F and 5.G, must be stored in one of the following formats:

–   The graphical bitmap format TIFF, version 6.0 baseline.
–   JPEG-2000 according to the ISO/IEC 15444-1:2004 standard. Information technology – JPEG 2000 image coding system – Part 1: Core coding system.

5.E.1.b Using both formats is allowed within the same submission information package.

TIFF documents must be compressed according to the following compression rules:

5.E.2.a Black/white documents must be compressed using CCITT/TSS grp. 3, grp. 4, PackBit or LZW.

5.E.2.b Documents with grey tones or colours must be compressed using PackBit or LZW.

5.F. Audio and video

5.F.1 Audio files must be stored in accordance with the MP3 DS/EN ISO/IEC 11172-3 standard.

5.F.2 The receiving archive may permit submission of audio files in the WAVE LPCM format as specified in *Multimedia Programming Interface and Data Specifications 1.0. IBM Corporation and Microsoft Corporation, August 1991.* However, bit depths must be multiples of 8.

5.F.3 Video files must be stored in accordance with one of the following standards:

–   MPEG-2 DS/EN ISO/IEC 13818-2. Audio, if any, must be encoded as MP3 as specified in ISO/IEC 13818-3.
–   MPEG-4 AVC DS/EN ISO/IEC 14496-10 (ITU-T H.264). Video must be encoded as specified in ISO/IEC 14496-10. Audio, if any, must be encoded as AAC as specified in ISO/IEC 14496-3. Video and audio must be packed in the MPEG-4 format as defined in ISO/IEC 14496-14.

5.G. Geodata

5.G.1 Data from geographical information systems and other geodata must be stored as GML files in accordance with GML 3v3.DK, the Danish profile of the GML standard ISO 19136.

5.G.2 GML files exceeding 1 GB must be split into units as directed by the receiving archive.

5.G.3 Each GML file, possibly after being split in accordance with 5.G.2, must be treated as a separate document in accordance with the rules in 4.G.

5.G.4 The required XML schemas for validation of the GML files must be included in the submission information package.

5.H. Compression

5.H.1 A submission information package may not be compressed more than the compression provided for or following from the document formats required for use in the submission information package, cf. 5.E and 5.F.

5.I. Optimisation

5.I.1 In specific cases, the receiving archive may decide to reduce the space required for the documents, e.g. by instructing that optimal bit depth be used.

5.J. No deterioration

5.J.1 In connection with the generation of the submission information package, the quality of the documents, including audio and video, must not be reduced over and above what might result from the format required for the submission information package or the instructions otherwise issued by the receiving archive.

Information on the submission information package

The information on the submission information package consists of the following elements:

– Archive description file, cf. 6.A
– Context documentation, cf. 6.B
– Data on the tables of the submission information package (table index), cf. 6.C
– Any SQL queries, cf. 6.D

6.A. Archive description file

6.A.1 All submission information packages must contain an archive description file including the information stated in Figure 6.1.

6.A.2 The archive description file must be named archiveIndex.xml and observe the related schema, cf. Schedule 8.

6.A.3 The content of the archive description file is agreed following discussion between the authorities and the receiving archive.

Figure 6.1

Element name	Designation	Description	Event space	Preva lence	Compu lsory
archiveInforma-tionPackageID	Submission information package ID	Unique ID allocated to the submission information package by the State Archives	Submission information package ID as defined in this Executive Order	1	Yes
archiveInforma-tionPackageID-Previous	Previous submission	Unique submission information package ID from previous submission from the same IT system	Submission information package ID as defined in this Executive Order or previous executives orders	0-1	No
archivePeriod-Start	Submission information package start date	Start date of the data submitted	Year, year-month or year-month-day	1	Yes
archivePeriodEnd	Submission information package end date	End date of the data submitted	Year, year-month or year-month-day	1	Yes

Figure 6.1

Element name	Designation	Description	Event space	Preva lence	Compu lsory
archiveInforma-tionPacketType	Final submission	Specification of whether the submission information package is a final submission	Boolean value	1	Yes
creatorName	Archive creator	The authorities which created the records. May also be organisational units within authorities or other contributors to the records	Free text	1-m	Yes
creationPeriod-Start	Archive creator start date	For each archive creator, the date when the archive creator started adding data to the IT system must be specified	Year, year-month or year-month-day	1-m	Yes
creationPeriod-End	Archive creator end date	For each archive creator, the date when the archive creator stopped adding data to the IT system must be specified	Year, year-month or year-month-day	1-m	Yes
archiveType	Submission information package period type	Specification of whether the archive period/year has been closed or whether this is a snapshot	Boolean value	1	Yes
systemName	System name	Official name of the IT system, writing out all abbreviations	Free text	1	Yes
alternativeName	Alternative system name	Alternative names of the IT system	Free text	0-m	No
systemPurpose	System purpose	Description of the purpose of creating and operating the IT system	Free text	1	Yes
systemContent	System content	The central population and central variables of the IT system	Free text	1	Yes

Figure 6.1

Element name	Designation	Description	Event space	Preva lence	Compu lsory
regionNum	Region numbers	Specification of whether region numbers are registered in the IT system in a systematic manner	Boolean value	1	Yes
komNum	Municipality numbers	Specification of whether municipality numbers are registered in the IT system in a systematic manner	Boolean value	1	Yes
cprNum	Civil registration numbers (CPR)	Specification of whether civil registration numbers are registered in the IT system in a systematic manner	Boolean value	1	Yes
cvrNum	CVR numbers	Specification of whether CVR numbers (number assigned by the Danish Central Business Register) are registered in the IT system in a systematic manner	Boolean value	1	Yes
matrikNum	Title numbers	Specification of whether title numbers are registered in the IT system in a systematic manner	Boolean value	1	Yes
bbrNum	BBR numbers	Specification of whether BBR numbers are registered in the IT system in a systematic manner	Boolean value	1	Yes
whoSygKod	WHO disease codes	Specification of whether WHO disease codes are registered in the IT system in a systematic manner	Boolean value	1	Yes

Figure 6.1

Element name	Designation	Description	Event space	Preva lence	Compul lsory
sourceName	Data source	Other IT systems having delivered data to the IT system (look-up, transfer, integration etc.)	Free text	0-m	No
userName	Data users	Other IT systems having used data from the IT system (look-up, transfer, integration etc.)	Free text	0-m	No
predecessorNam e	Predecessor systems	Systems previously handling the same function	Free text	0-m	No
formVersion	FORM version	Indication of the FORM version (the joint public business reference model) from which the categorisation below was retrieved	Valid FORM version numbers	1	Compul sory for IT systems from public authoriti es
formClass	FORM classification	Categorisation of the submission information package according to FORM	Any valid FORM reference according to the FORM version specified	1-m	Compul sory for IT systems from public authoriti es
formClassText	FORM classification plain text	FORM classification in plain text	Free text	1-m	Compul sory for IT systems from public authoriti es

Figure 6.1

Element name	Designation	Description	Event space	Prevalence	Compulsory
containsDigital-Documents	Contains digital documents	Specification of whether the submission information package contains digital documents in addition to the context documentation	Boolean value	1	Yes
searchRelated-OtherRecords	Search facility for other cases or documents	Specification of whether the submission information package is a required search facility for paper cases/documents or cases/documents in another IT system	Boolean value	1	Yes
relatedRecords-Name	Addressed records	Reference to the records for which the submission information package is a search facility	Free text	0-m	Yes, if the answer to the previous question was yes
systemFile-Concept	Existence of a case expression in the IT system	Indication that the IT system has a case expression, i.e. a registered relationship between documents pertaining to the same case	Boolean value. Can only be *true* if the IT system contains digital documents	1	Yes
multipleData-Collection	SOA architecture	Specification of whether the IT system is composed of data and any documents from different IT systems in a service-oriented architecture	Boolean value	1	Yes

Figure 6.1

Element name	Designation	Description	Event space	Preva lence	Compu lsory
personalData-RestrictedInfo	Personal data	Specification of whether the submission information package contains sensitive personal data pursuant to the Danish Act on Processing of Personal Data (*Persondataloven*)	Boolean value	1	Yes
otherAccessType Restrictions	Information extending the time limit	Specification of whether the submission information package contains other information that may justify a longer access period	Boolean value	1	Yes
archiveApproval	Approval archive	Indication of which public archives are approving the submission information package	Identification of the relevant archives (2-4 characters)	1	Yes
archive-Restrictions	Access limitations	Indication of any conditions governing access to the material. The element can be used as instructed by the receiving archive	Free text	0-1	No

6.B. Context documentation

6.B.1 All submission information packages must contain documents documenting the IT system's administrative function as well as its structure and functionality.

6.B.2 After consulting the submitting authorities, the receiving archive determines which documents are to be submitted, including which points in Figure 6.2 are not relevant to the submission in question.

6.B.3.a The documents are placed in one or more of the categories shown in Figure 6.2.

6.B.3.b Information on the categorisation is recorded in the index file contextDocumentationIndex, cf. 4.C.4.a.

6.B.4 The documents must be stored in one of the permitted document formats for the submission information package, cf. 5.E - 5.F.

Figure 6.2

1. Documentation regarding the administrative use of the IT system		
	Element name	**Description**
1.a	systemPurpose	Purpose of the IT system
1.b	systemRegulations	Legal basis for the IT system
1.c	systemContent	Content, population and special expressions of the IT system
1.d	systemAdministrativeFunctions	Administrative functions in the IT system
1.e	systemPresentationStructure	Presentation structure of the IT system
1.f	systemDataProvision	Provision of data
1.g	systemDataTransfer	Transfer of data
1.h	systemPreviousSubsequentFunctions	Data and functions identical in the predecessor and successor systems
1.i	systemAgencyQualityControl	The authorities' own quality control
1.j	systemPublication	Publication of and on data
1.k	systemInformationOther	Other

2. Documentation regarding the technical design, operation and development of the IT system		
	Element name	**Description**
2.a	operationalSystemInformation	Structure of the operational version
2.b	operationalSystemConvertedInformation	Conversion by the authorities
2.c	operationalSystemSOA	Documentation of the composition of data and any documents from several different IT systems in a service-oriented architecture
2.d	operationalSystemInformationOther	Other

3. Documentation regarding the archive creator's data submission		
	Element name	**Description**
3.a	archivalProvisions	The archives' provisions, including submission provisions
3.b	archivalTransformationInformation	Documentation of the conversion from operational version to submission information package
3.c	archivalInformationOther	Other

4. Documentation regarding the archives' receipt of data (to be filled in by the receiving archive)		
	Element name	**Description**
4.a	archivistNotes	The archivist's notes
4.b	archivalTestNotes	Test notes
4.c	archivalInformationOther	Other
5. Documentation regarding the archives' preservation of the submission information package (to be filled in by the receiving archive)		
	Element name	**Description**
5.a	archivalMigrationInformation	Conversion by the archives
5.b	archivalInformationOther	Other
6. Other documentation		
	Element name	**Description**
6.a	informationOther	Other

6.C. Data on the tables of the submission information package

6.C.1 A submission information package must contain documentation of the tables and relations of the submission information package (table index). The table index must contain the information shown in Figure 6.3 below.

Figure 6.3

1. Database information				
	Element name	*Description*	*Prevalence per database*	*Compulsory*
1.a	version	Format version, always '1.0'	1	Yes
1.b	dbName	Short name of the database	0-1	Yes, if the information is available in the database
1.c	databaseProduct	Name and version of the database product from which the data were filed	0-1	Yes, if the information is available in the database
2. Information on tables and views				
	Element name	*Description*	*Prevalence per submission information package*	*Compulsory*
2.a	tables	List of tables in the database	1	Yes
2.b	views	List of views in the database	0-1	Yes, if views are included in the submission information package

3. Information on the individual tables				
	Element name	*Description*	*Prevalence per table*	*Compulsory*
3.a	name	Table name. Must not start with a number.	1	Yes
3.b	folder	Name of the folder containing the table and the related schema	1	Yes
3.c	description	Description of the content and meaning of the table	1	Yes
3.d	columns	List of columns in the table	1-m	Yes
3.e	primaryKey	The primary key of the table	1	Yes
3.f	foreignKey	Foreign key in the table	0-m	Yes, if there are foreign keys
3.g	rows	Indication of the number of rows in the table	1	Yes
4. Column information				
	Element name	**Description**	**Prevalence per column**	**Compulsory**
4.a	name	Column name	1	Yes
4.b	columnID	Unique column identification. Starts with the letter 'c' followed by the number of the column in the table.	1	Yes
4.c	type	SQL:1999 data type	1	Yes
4.d	typeOriginal	Original data type	0-1	Yes, if the information is available in the database
4.e	defaultValue	Default value of fields in the column	0-1	Yes, if the information is available in the database
4.f	nullable	Specification of whether fields in the column can be 'NULL'. Boolean value.	1	Yes
4.g	description	Description of column content	1	Yes
4.h	functionalDescription	Indication of the column function according to Figure 6.4, Figure 6.5 and Figure 6.6	0-m	Yes, if the column has one of the functions specified

5. Primary key information

	Element name	Description	Prevalence per key in the table	Compulsory
5.a	name	Name of primary key. The name must be unique within the submission information package and be in accordance with the rules for *constraint names* in the SQL:1999 standard	1	Yes
5.b	column	Original name of columns in the primary key	1-m	Yes

6. Foreign key information

	Element name	Description	Prevalence per key	Compulsory
6.a	name	Name of foreign key. The name must be unique within the submission information package and be in accordance with the rules for *constraint names* in the SQL:1999 standard	1	Yes
6.b	referencedTable	The table to which the foreign key refers	1	Yes
6.c	reference	Original name of the columns forming part of the foreign key	1-m	Yes
6.d	referenced	Original name of the columns to which the foreign key refers	1-m	Yes

7. Information on views and queries

	Element name	Description	Prevalence per query or view	Compulsory
7.a	name	View name	1	Yes
7.b	queryOriginal	Original SQL query defining view or SQL query created specifically for the submission information package	1	Yes
7.c	description	Content and meaning of view or SQL query	0-1	Yes, if they can be extracted from the database or if it concerns queries created specifically for the submission information package

6.C.2 System views are not included.

6.C.3 The receiving archive may direct that the most important views must be described, cf. Figure 6.3, 7.c.

6.C.4 Special information must be marked up for IT systems with recording of information on documents.

6.C.5 For submission information packages of IT systems mentioned in 6.C.4, columns containing special information, cf. Figure 6.4 - Figure 6.6, must be identified using the element functionalDescription, cf. Figure 6.3, 4.h.

6.C.6 The special information specified in Figure 6.6 must be marked up to the extent that it has been recorded in the IT system. If the information in Figure 6.6 is not recorded in the IT system, any alternative mark-ups must be agreed in connection with submission to ensure identification of documents pertaining to the same case, cf. the applicable provisions.

Figure 6.4

Mark-up of columns containing fixed information in submission information packages of IT systems with recording of documents shared by several authorities	
Information	**Description**
Authority identification	The column(s) in the submission information package containing information on the authorities which have recorded the case or the document

Figure 6.5

Mark-up of columns containing fixed information in submission information packages of IT systems with documents		
Information	**Description**	**Event space in table data**
Document identification	Used to indicate the column(s) in the submission information package describing the unique identifier of the documents	
Storage form	Used to indicate the columns(s) in the submission information package describing whether the document has been stored digitally, on paper or partly on paper	Fully or partly digitally = 1, paper = 2, not relevant = 3
Submitted	Used for submission of snapshots etc. to indicate the column(s) in the submission information package describing whether the document has already been submitted in a previous submission information package	Previously submitted = 1, not previously submitted = 2

Figure 6.6

Mark-up of columns containing information in submission information packages of IT systems with documents	
Information	**Description**
Case identification	The column(s) in the submission information package describing the unique identifier of the cases
Case title	The column(s) in the submission information package containing the case titles
Document title	The column(s) in the submission information package containing the document titles/descriptions
Document date	The column(s) in the submission information package containing information on the dates of submission and receipt of the documents
Sender/recipient	The column(s) in the submission information package containing information on the sender or recipient of the documents
Digital signature	The column(s) in the submission information package containing information extracted from a digital signature
FORM	The column(s) in the submission information package containing a reference to FORM (the joint public business reference model)
Discarding	The column(s) in the submission information package containing information on preservation and discarding

6.D. SQL queries

6.D.1 The receiving archive may decide that a number of SQL queries must be defined for a submission information package for documentation of certain relations in the submission information package.

6.D.2 The SQL queries must be created in accordance with the SQL:1999 (core) standard.

6.D.3 The queries must be placed in »Information on views and queries« in the table index, cf. Figure 6.3, 7, and be named according to the authorities' own choice; however, such that the name of the relevant queries starts with »AV«.

Submission medium

7.A.1 Submission information packages may be submitted on a CD-R, DVD-R or USB medium.

7.A.2 The number of CD-Rs and DVD-Rs in one submission may not exceed ten, unless otherwise agreed between the submitting authority and the receiving archive.

7.A.3 The submitting authority and the receiving archive may make an agreement on submission on other media or other methods for transport of data.

7.A.4 The receiving archive may permit encryption of a submission information package in connection with transport.

Schemas

Complete schemas for use for creation of a submission information package are available on the website of the State Archives.