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# Analysis of the legal standard **AKOMA NTOSO**

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University of Bologna



# AKOMA NTOSO

- In 2004 the United Nation Department for Economic and Social Affairs (UN/DESA) started a project for “Strengthening Parliamentary Information System in Africa”
- **A**rchitecture for **K**nowledge-**O**riented **M**anagement of **A**ny **N**ormative **T**exts using **O**pen **S**tandards and **O**ntologies.
  - A rigorous approach to designing document classes in XML
  - A systematic mechanism for referencing documents within and across country borders based on URIs
  - A ontological sound approach to designing metadata and relationships between different documents and different versions of documents.

## Name and symbol



- “Akoma Ntoso” means “Linked hearts”
- It is the symbol used by the Akan people of West Africa to represent understanding and agreement.
- Likewise, AKOMA NTOSO represents the common standards that provide open access to parliamentary documentation and allow Parliaments to exchange information more efficiently.

# Encoding documents in Akoma Ntoso

- **Akoma Ntoso defines a common format for documents of African parliamentary activities**
  - Primary Legislation
  - Parliamentary Debates
  - Amendment lists,
  - Committee briefs,
  - Journals
- Akoma Ntoso 1.0: a pattern-based **XML** language defined in **DTD** and XML-Schema

Metadata – number and source of publication

I

(Acts whose publication is obligatory)

EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE No 95/2/EC  
of 20 February 1995  
on food additives other than colours and sweeteners

preface

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 100a thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

Acting in accordance with the procedure laid down in Article 189b of the Treaty <sup>(3)</sup>,

Having regard to the Council Directive 89/107/EEC of 21 December 1988 on the approximation of the laws of the Member States concerning food additives authorized for use in foodstuffs intended for human consumption <sup>(4)</sup>, and in particular Article 3 (2) thereof,

Whereas it is necessary to lay down strict rules for the use of food additives in infant formulae, follow-on formulae and weaning foods, as referred to in Council Directive 89/398/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to foodstuffs intended for particular nutritional uses <sup>(5)</sup>, and in particular Article 4 (1) (e) thereof;

Whereas this Directive is not intended to affect rules relating to sweeteners and colours;

Whereas, pending specific provisions pursuant to Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market <sup>(6)</sup>, and pursuant to Council Directive 90/642/EEC of 27 November 1990 on the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables <sup>(7)</sup>, certain substances belonging to this category are provisionally covered by this Directive;

preamble

Metadata – number and source of publication

be adopted in accordance with the procedure laid down in Article 11 of Directive 89/107/EEC;

Whereas the Scientific Committee for Food has not yet given an opinion on flour treatment agents; whereas those agents will be the subject of a separate Directive;

Whereas this Directive replaces Directives 64/54/EEC <sup>(1)</sup>, 70/357/EEC <sup>(2)</sup>, 74/329/EEC <sup>(3)</sup> and 83/463/EEC <sup>(4)</sup>; whereas those Directives are hereby

NOTE

<sup>(1)</sup> OJ No 12, 27. 1. 1964, p. 161/64.  
<sup>(2)</sup> OJ No L 157, 18. 7. 1970, p. 31.  
<sup>(3)</sup> OJ No L 189, 12. 7. 1974, p. 1.  
<sup>(4)</sup> OJ No L 255, 15. 9. 1983, p. 1.

1. This Directive is a specific Directive forming a part of the comprehensive Directive, within the meaning of Article 3 of Directive 89/107/EEC, and applies to additives other than colours, sweeteners and flour treatment agents.

2. Only additives which satisfy the requirements laid down by the Scientific Committee for Food may be used in foodstuffs.

(g) 'anti-foaming agents' are substances which prevent or reduce foaming;

(h) 'stabilisers' are substances which contribute to the volume of a foodstuff without contributing significantly to its available energy value;

(i) 'emulsifiers' are substances which make it possible to form or maintain a homogenous mixture of two or more immiscible phases such as oil and water in a foodstuff;

(j) 'emulsifying salts' are substances which convert proteins contained in cheese into a dispersed form and thereby bring about homogenous distribution of fat and other components;

(k) 'firming agents' are substances which make or keep tissues of fruit or vegetables firm or crisp, or interact with gelling agents to produce or strengthen a gel;

(l) 'flavour enhancers' are substances which enhance the existing taste and/or odour of a foodstuff;

(m) 'foaming agents' are substances which make it possible to form a homogenous dispersion of a gaseous phase in a liquid or solid foodstuff;

(n) 'gelling agents' are substances which give a foodstuff texture through formation of a gel;

preamble

body

2. References to these repealed Directives and to the purity criteria for certain food additives referred to in them shall henceforth be construed as references to this Directive.

#### Article 9

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 25 September 1996 in order to:

- allow, by 25 September 1996 at the latest, trade in and use of products conforming to this Directive,
- prohibit by 25 March 1997 at the latest, trade in and use of products not conforming to this Directive; products put on the market or labelled before that date which do not comply with this Directive may, however, be marketed until stocks are exhausted.

They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by the Member States.

#### Article 10

This Directive shall enter into force on the seventh day following that of its publication in the *Official Journal of the European Communities*.

#### Article 11

This Directive is addressed to the Member States.

Done at Brussels, 20 February 1995.

*For the European  
Parliament*

*The President*

K. HÄNSCH

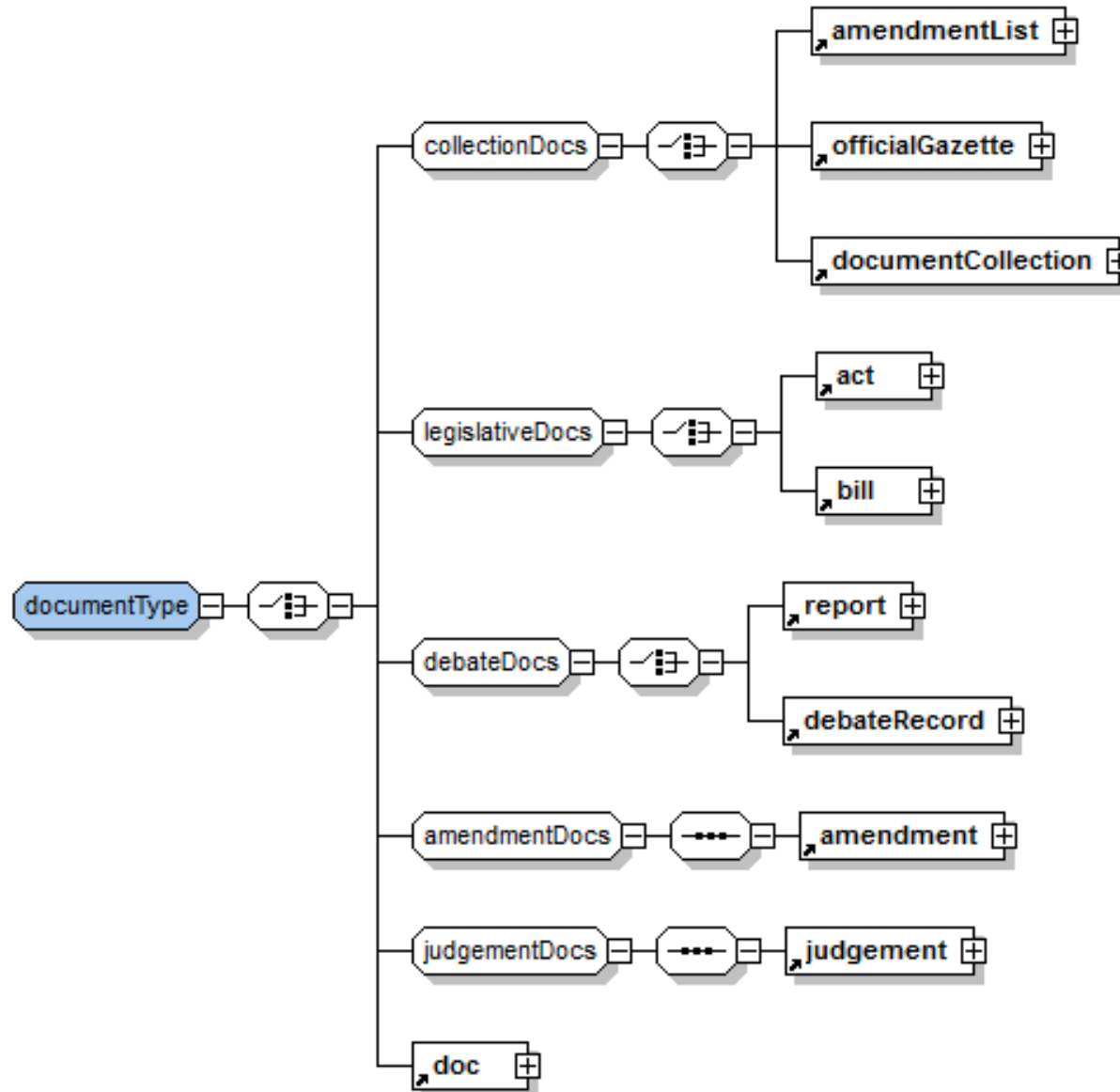
*For the Council*

*The President*

J. PUECH

conclusion

# Akoma Ntoso types document

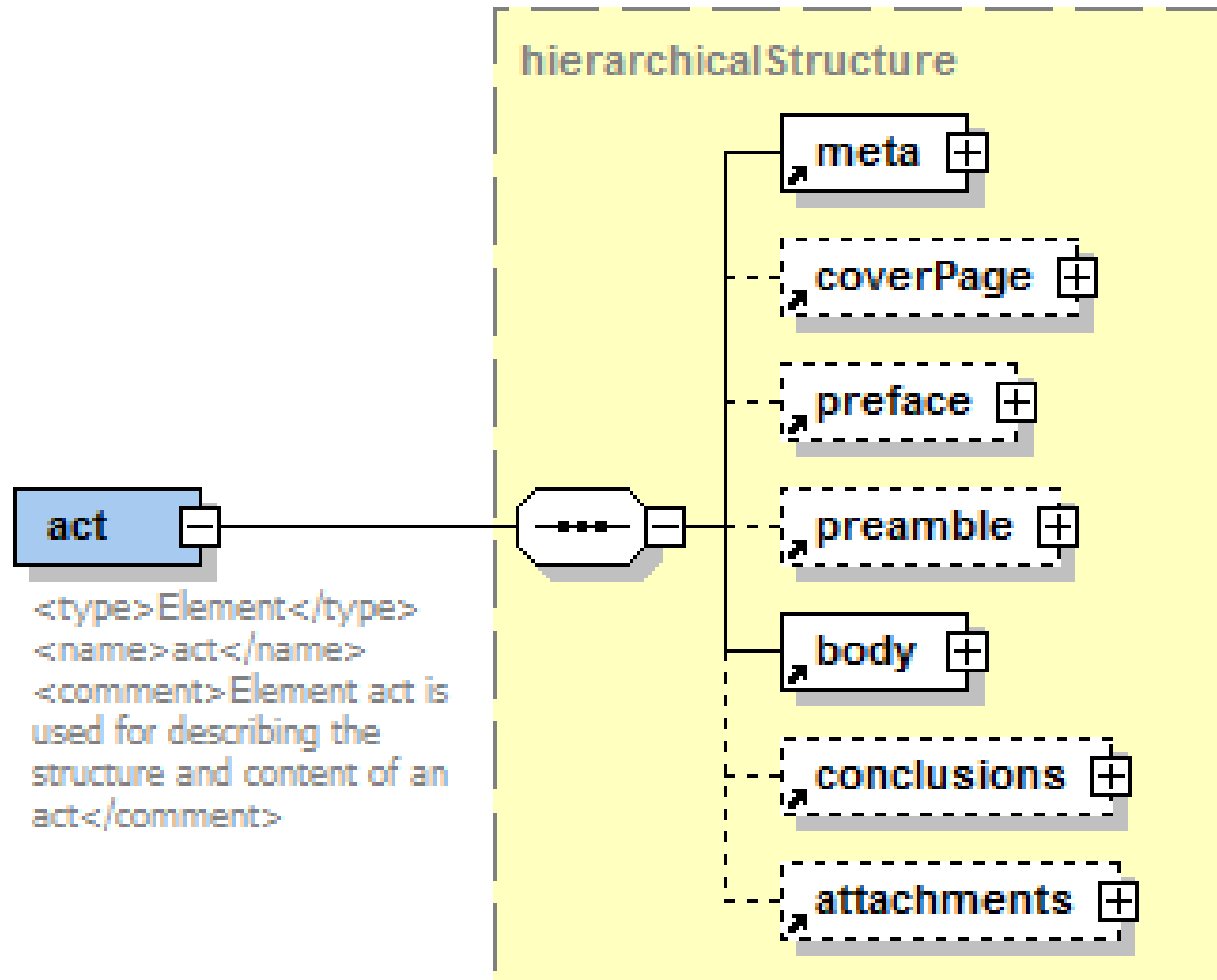


Akoma Ntoso doc families:

- ACT
- BILL
- REPORT
- DEBATE RECORD (Hansard)
- Judgment



# The Akoma Ntoso ACT main structure



# The Akoma Ntoso main structure

```
<!ELEMENT akomaNtoso %documentType; >
```

```
<!ENTITY % legislativeDocs "act | bill" >
```

```
<!ENTITY % judgementDocs "judgement" >
```

```
<!ENTITY % debateDocs "report | debateRecord" >
```

```
<!ENTITY % documentType
```

```
"(%legislativeDocs; | %debateDocs; | %judgementDocs; | doc)" >
```

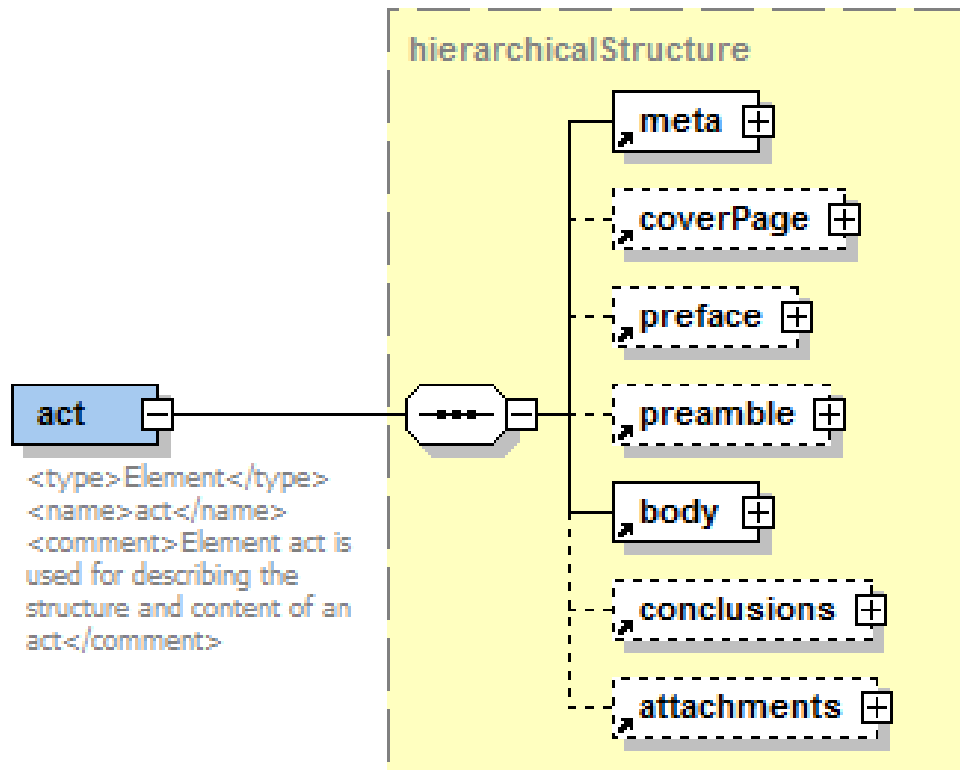
```
<!ELEMENT akomaNtoso
```

```
( act | bill | judgement | report | debateRecord | doc )" >
```

## The main structure of the example

```
<?xml version="1.0" encoding="utf-8"
  standalone="no">
<?xml-stylesheet type="text/xsl" href="..."?>
<akomaNtoso xmlns="http://www.akomantoso.org/1.0"
  ....>
  <act contains="originalVersion">
    [ metadata, content and presentation]
  </act>
</akomaNtoso>
```

# ACT structure



An Act is organized in 5 main blocks:

- ❑ coverPage
- ❑ Preface
- ❑ Preamble
- ❑ Enacting Clauses (body)
- ❑ Conclusions

- Schedules  
(attachments/annexes)

# The main structure of the document

```
<?xml version="1.0" encoding="utf-8" standalone="no">
```

```
<?xml-stylesheet type="text/xsl" href="..."?>
```

```
<akomaNtoso xmlns="http://www.akomantoso.org/1.0"
```

```
... ..>
```

```
<act contains="originalVersion">
```

```
<meta>...</meta>
```

```
<preface>...</preface>
```

```
<preamble>...</preamble>
```

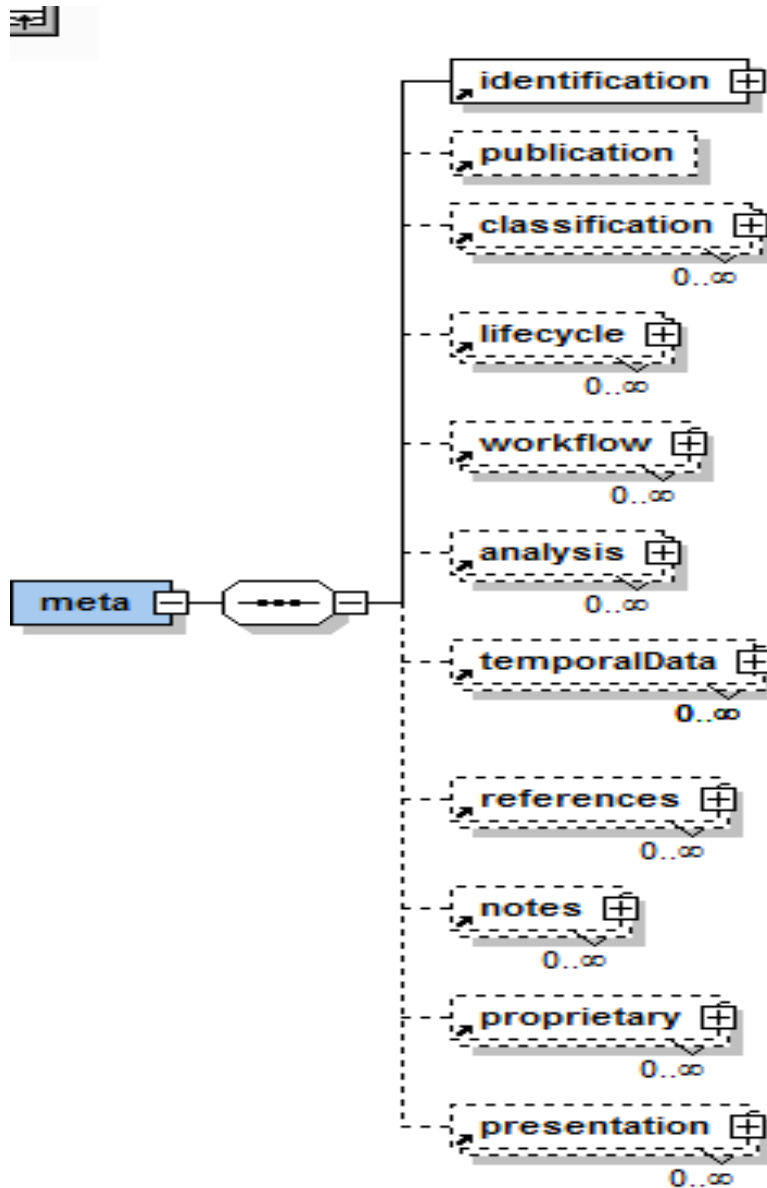
```
<body>...</body>
```

```
<conclusions>...</conclusions>
```

```
</act>
```

```
</akomaNtoso>
```

# Meta



- identification
- publication

# Metadata – identification - work

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  <FRBRWork>
    <FRBRthis value="/eu/act/1995-02-20/95-2-ec/main"/>
    <FRBRuri value="/eu/act/1995-02-20/95-2-ec"/>
    <FRBRdate date="1995-02-20"
name="Generation"/>
    <FRBRauthor href="#parliament" as="#author"/>
    <components>
      <component id="wmain" href="#emain"
name="main" showAs="Main document"/>
    </components>
  </FRBRWork>
```

# Meta – identification - expression

```
<FRBRExpression>  
  <FRBRthis value="/eu/act/1995-02-20/95-2-  
ec/eng@/main"/>  
  <FRBRuri value="/eu/act/1995-02-20/95-2-ec/eng@"/>  
  <FRBRdate date="2009-09-08" name="Generation"/>  
  <FRBRauthor href="#cirsfid" as="#jurist"/>  
  <components>  
    <component id="emain" href="#mmain"  
name="main" showAs="Main document"/>  
  </components>  
</FRBRExpression>
```



# Meta – indetification - manifestation

<FRBRManifestation>

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<FRBRuri value="/eu/act/1995-02-20/95-2-ec/eng@.akn"/>

<FRBRdate date="2008-09-09" name="Generation"/>

<FRBRauthor href="#cirsfid" as="#editor"/>

<FRBRauthor href="#P" as="#editor"/>

<components>

<component id="mmain" href="main.xml" name="main" showAs="Main document"/>

</components>

</FRBRManifestation>

## I

*(Acts whose publication is obligatory)*

**EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE No 95/2/EC  
of 20 February 1995  
on food additives other than colours and sweeteners**



preface

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Having regard to the Treaty establishing the European  
Community, and in particular Article 100a thereof,

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Committee <sup>(2)</sup>,

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Whereas it is necessary to lay down strict rules for the  
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Directive 89/398/EEC of 3 May 1989 on the  
approximation of the laws of the Member States relating  
to foodstuffs intended for particular nutritional uses <sup>(5)</sup>,  
and in particular Article 4 (1) (e) thereof;

Whereas this Directive is not intended to affect rules  
relating to sweeteners and colours;

Whereas, pending specific provisions pursuant to Council  
Directive 91/414/EEC of 15 July 1991 concerning the  
placing of plant protection products on the market <sup>(6)</sup>,  
and pursuant to Council Directive 90/642/EEC of  
27 November 1990 on the fixing of maximum levels for  
pesticide residues in and on certain products of plant  
origin, including fruit and vegetables <sup>(7)</sup>, certain  
substances belonging to this category are provisionally  
covered by this Directive;

## Preface

- Type of document - docType
- Proponent - docProponent
- Title - docTitle
- Number - docNumber
- Date of assent - docDate
- **Date of commencement (metadata) - meta**
- **Date of publication (metadata) – meta**
- Table of content (toc)
- ...

## Preface element

```
<preface>
```

```
<p>European Parliament and Council Directive No  
<docNumber>95/2/EC</docNumber> of <docDate  
date="1995-02-20">20 February 1995</docDate>
```

```
<eol/>
```

```
<docTitle id="ActTitle">on food additives other than  
colours and sweeteners</docTitle>
```

```
<eol/>Official Journal L 061 , 18/03/1995 P. 0001 -  
0040</p>
```

```
</preface>
```

## I

*(Acts whose publication is obligatory)*

## EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE No 95/2/EC

of 20 February 1995

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pesticide residues in and on certain products of plant  
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substances belonging to this category are provisionally  
covered by this Directive;

preamble

# Preamble

- Citations
  - List of other legislation resources that empower the current document
- Recitals
  - justifications
  - and motivations

```
<preamble id="preamble">
```

```
  <p> THE EUROPEAN  
  PARLIAMENT AND THE  
  COUNCIL OF THE  
  EUROPEAN  
  UNION,<eol/>Having regard to  
  the Treaty establishing the  
  European Community, and in  
  particular Article 100a  
  thereof,<eol/>
```

```
</preamble>
```

**article**

*Article 3*

**paragraph**

1. The presence of a food additive in a foodstuff is permissible:

**content**

**p**

— in a compound foodstuff other than one mentioned in Article 2 (3) to the extent that the food additive is permitted in one of the ingredients of the compound foodstuff, or

— if the foodstuff is destined to be used solely in the preparation of a compound foodstuff and to an extent such that the compound foodstuff conforms to the provisions of this Directive.

2. Paragraph 1 does not apply to infant formulae, follow-on formulae and weaning foods, as referred to in Directive 89/398/EEC, except where specially provided for.

# Strong hierarchical structures

```
<body>
  <article id="art3">
    <num>Article 3</num>
    <paragraph id="art3-par1">
      <num>1.</num>
      <content>
        <p>The presence of a food
additive in a foodstuff is permissible:<eol/>- in a
compound foodstuff other than one mentioned in Article 2
(3) to the extent that the food additive is permitted in one
of the ingredients of the compound foodstuff, or<eol/>- if
the foodstuff is destined to be used solely in the
preparation of a compound foodstuff and to an extent such
that the compound foodstuff conforms to the provisions of
this Directive.</p>
      </content>
    </paragraph >
  </article>
</body>
```



**ARTICLE***Article 1***paragraph**

1. This Directive is a specific Directive forming a part of the comprehensive Directive, within the meaning of Article 3 of Directive 89/107/EEC, and applies to additives other than colours, sweeteners and flour treatment agents.

**paragraph**

2. Only additives which satisfy the requirements laid down by the Scientific Committee for Food may be used in foodstuffs.

**paragraph**

3. For the purpose of this Directive:

**list****item**

(a) 'preservatives' are substances which prolong the shelf-life of foodstuffs by protecting them against deterioration caused by micro-organisms;

**item**

(b) 'antioxidants' are substances which prolong the shelf-life of foodstuffs by protecting them against deterioration caused by oxidation, such as fat rancidity and colour changes;

## List, item

```
<list id="art1-par3-lst1">
```

```
  <item id="art1-par3-itma">
```

```
    <num>(a)</num>
```

```
      <p>'preservatives` are parstances which  
prolong the shelf-life of foodstuffs by protecting  
them against deterioration caused by micro-  
organisms;</p>
```

```
    </item>
```

# Strong hierarchical structure(s)

<b>Anglophone tradition</b>	
<b>Higher Division</b>	
[part]	Part II (Title)
[chapter]	Chapter I (Title)
[subchapter]	Subchapter I (Title)
<b>Basic Unit</b>	
[section]	Section 12 (Title)
<b>Subdivision</b>	
[subsection]	(1) (side note)
[paragraph]	(a) (side note)
[subparagraph]	(i) (side note)
[item]	(a) (side note)
[subitem]	(aa) (side note)
[schedule]	

# Conclusions

- Date of signature
- Place of signature
- Signature

Done at Brussels, 20 February 1995.

*For the European  
Parliament*

*The President*  
K. HÄNSCH

For the Council  
The President  
J. PUECH

<conclusions>

<p>Done at Brussels, 20 February  
1995.<eol/>For the European  
Parliament<eol/>The President<eol/>K.  
HÄNSCH<eol/>For the  
Council<eol/>The President<eol/>J.  
PUECH</p>

</conclusions>