

# TT NITF version 3.4

**Revision history.**

**Version 1:** Published in December 1996.

**Version 2:** Published in November 1997. Registered with IPTC having number 27.

**Version 3:** Published 1998.

**Version 3.1:** Published at the autumn 1999 with, amongst other, details for sport tables and press releases.

**Version 3.2:** Published in July 2002. Minor adjustments of the rules in the dtd. Added values in some lists. The new big thing is the id-codes for sport series, matches and teams.

**Version 3.3:** Published in December 2002. Addition of attribute for EPOST in BYLINE and additional attributes for sportsresults.

**Version 3.4:** Published in October 2010. Added FRAGA and SVAR in BRODTEXT. Added support for EMBARGODATETIME and TAKE-number in HEAD.

## Introduction

This document is meant to be a help to software developers and technical responsible persons at TT customer sites. It is a description of the different fields in the send format TTNITF. Technically speaking the description is only valid for the SGML feed that TT transmits to its customers. For alternative feeds in XML format the document can be used for information but not for detailed control or XML validation since there are some differences between XML and SGML.

Some explanations:

**SGML** = Standard Generalised Mark-up Language. An International standard to define text according to content and structure.

**DTD** = Document Type Definition. A sort of template in the SGML-standard describing which tags are relevant and in what order they can occur.

**HTML** = A template (DTD) for documents on the Internet.

**IPTC** = International Press and Telecommunications Council. (<http://www.iptc.org>)

**IIM** = Information Interchange Model. A model for an electronic envelope, produced by IPTC. (<http://www.iptc.org/IIM>)

**NITF** = News Industry Text Format. A SGML DTD produced by IPTC for international news delivery. (<http://www.nitf.org/>)

**TTNIFT** = TT:s SGML DTD, built upon IIM and NITF and registered with IPTC having number 27. (<http://www.tt.se/>)

**XML** = eXtensible Markup Language. Developed by W3C as a slim version of SGML with aim of producing a better alternative to HTML for web use.

If you have any further questions after reading this document please don't hesitate to contact us:

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## Article header according to IIM – V4

Here we list and explain the recordsets and the fields in the article header from recordsets 1, 2, 6, 7, 8 and 9 according to IIM - version 4 - that TT transmit.

When a certain number of characters is limited for a field it is the number that TT uses. We have in several cases put the limit lower than in the IIM.

The word “text” is used in a broad meaning. It can mean a table, result list etc.

For additional information about IIM please look at IPTC (<http://www.iptc.org/site/standards.html>).

### Recordset 1

Summary of the fields in recordset 1.

Number	Explanation	Example
1:00	Version of IIM	04
1:05	Destination	ALL MSV VLT
1:20	File format	27
1:22	File format version	03
1:30	Company	TT
1:40	Unique running number per day.	00000345
1:50	Product ID	INR UTR SPT
1:70	Sent date	19991110
1:80	Sent time	133045+-0100
1:100	UNO - Unique ID-code for every article.	19991110:TT:0345:0

## Description of the fields in Recordset 1:

<b>Version of IIM</b>	<i>States the version of IIM</i>	
<b>1:00</b>	Two figures. Only one occurrence.	Does not have to be used at the receiving site.
<b>Mandatory</b>	Example: 04	<MODVER ID="1:00" VER="04">
<b>Comment:</b> Present version of IIM is 04.		

<b>Destination</b>	<i>States the destination for the article</i>	
<b>1:05</b>	Three characters. Repeatable.	Can be used for selection at the receiving site
<b>Optional</b>	Example: ALL	<DEST ID="1:05">ALL</DEST>
<b>Comment:</b> The destination defines to whom an article is directed. There are also codes for different geographical areas in Sweden. If more than one destination is given the whole destination field 1:05 is repeated for each code. Note: Codes for EKO, HOK, NTB, FNB, RBN shall not be accepted by others than the intended receivers.		

<b>Destination</b>	<b>Short form</b>
Redaktioner	ALL
<i>Skärmkunder</i>	<i>EKO</i>
<i>Norden</i>	<i>HOK</i>
<i>FNB</i>	<i>FNB</i>
<i>Ritzau</i>	<i>RBN</i>
<i>NTB</i>	<i>NTB</i>
Övre Norrland	ONO
Nedre Norrland	NNO
Storstockholm	STO
Mellansverige och Gotland	MSV
Västsverige	VSV
Småland och Öland	SMO
Sydsverige	SBL

<b>File format</b>	<i>States the file format</i>	
<b>1:20</b>	Two figures. Only one occurrence.	Does not have to be used at the receiving site.
<b>Mandatory</b>	Example: 27	<FIFO ID="1:20" FFNO="27">
<b>Comment:</b> TT has registered TT-NITF as a standard with IPTC. TTNIFT has received number 27.		

<b>File format version</b>	<i>States the version of the file format</i>	
<b>1:22</b>	Two figures. Only one occurrence.	Does not have to be used at the receiving site.
<b>Mandatory</b>	Example: 03	<FIFOVER ID="1:22" FFVERNO="03">
<b>Comment:</b> Current version number of TT-NITF is 03.		

<b>Company</b>	<i>States the sender</i>	
<b>1:30</b>	Up to 10 characters. Only one occurrence.	Does not have to be used at the receiving site.
<b>Mandatory</b>	Example: TT	<SERVID ID="1:30">TT</SERVID>
<b>Comment:</b> TT is the normal content in this field in this version of TTNITF. TT Spektra uses TTS. Distributers of press releases use their own abbreviation.		

<b>Unique running number per day</b>	<i>States a unique number per article</i>	
<b>1:40</b>	Eight figures. Only one occurrence.	
<b>Optional</b>	Example: 00051345	<NR ID="1:40">00051345</NR>
<b>Comment:</b> The numbering series starts all over from zero at midnight for sportsresults. There are separate number series for TT, BIT and BW etc. For a unique id use the UNO in 1:100. From Feb 1 2015 the TT news is numbered continuously and no restart at midnight.		

<b>Product-ID</b>	<i>States type of text</i>	
<b>1:50</b>	Three characters. Repeatable.	Can be used for selection at the receiving site.
<b>Mandatory</b>	Example: INR	<PRODID ID="1:50" TKOD="INR">
<b>Comment:</b> Always three characters. No Å, Ä or Ö. If more than one Product-ID is given the Product-ID field 1:50 is repeated for each Product-ID.		

<b>Product-ID</b>	<b>Short form</b>
DOMESTIC	<b>INR</b>
FOREIGN	<b>UTR</b>
Economy	<b>EKO</b>
SPORT TEXT	<b>SPT</b>
SPORT RESULT	<b>SPR</b>
STOCK EXCHANGE TEXTS	<b>BOR</b>
BROAD STOCK EXCHANGE TABLES	<b>BBO</b>
THIN STOCK EXCHANGE TABLES	<b>BOT</b>
SPORT TABLES	<b>TBL</b>
LOTTERY RESULTS	<b>LOT</b>
POOLS TABLES	<b>TTL</b>
BONDS	<b>OBL</b>
PM	<b>TPM</b>
ELECTION RESULTS	<b>VAL</b>
EDITORIAL MESSAGE	<b>RED</b>
PRESS RELEASES	<b>PRM</b>
FAMILY	<b>FAM</b>
OTHER	<b>OVR</b>
Feature	<b>FEA</b>



Entertainment and Culture	<b>NOJ</b>
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<b>Send date</b>	<i>States the transmission date</i>	
<b>1:70</b>	Eight figures. Only one occurrence. Format : YYYYMMDD.	
<b>Mandatory</b>	Example: 19971110	<DATESENT ID="1:70"> 19971110</DATESENT>
<b>Comment:</b>		

<b>Send time</b>	<i>States time of the transmission</i>	
<b>1:80</b>	Eleven characters. Only one occurrence. Format : HHMMSS+-HHMM	
<b>Mandatory</b>	Example: 134530+0100	<TIMESENT ID="1:80"> 164523+0100</TIMESENT>
<b>Comment:</b> The local time of the transmission and the time span to UTC, Universal Co-ordinated Time.		

<b>UNO - Unique Name on an Object</b>	<i>States an unique id for each article.</i>	
<b>1:100</b>	At least 14 and at most 80 characters.	Can be used by Action, 2:42
<b>Mandatory</b>	Example: 19971110:TT:0345:0	<UNO ID="1:100"> 19971110:TT:0345:0</UNO>
<p><b>Comment:</b> UNO is a completely unique ID over time for every text, table, etc, Presently TT uses a combination of transmission day, company, running number and 1-9 characters for OVI (Object Variant Indicator). OVI can be used, for example, to state another file format.</p> <p>The standard value is 0 (zero). TT:s OVI will for now be 0 (zero). As a separator colon is used. TT Spektra will use TTS instead of TT. In pressreleases the TT part will be BI or BW or other abbreviations. From Feb 2015 the TT news uses a number that is not restarted at midnight and therefor longer than 4 number.</p> <p>It is possible that the UNO in the future will be a guid with no meaning other than a unique identifier. For example: 080742c9-f851-42d0-a4fa-5979021fc6e8.</p> <p>Future use could be the possibility to have links between text, picture, graphics etc through a UNO for each object.</p> <p><i>See further Action 2:42</i></p>		

**Recordset 2****Summary of the fields in recordset 2.**

<b>Nr</b>	<b>Explanation</b>	<b>Example</b>
2:00	Version number.	Same as 1:00, presently "04".
2:03	Text type.	01:PUBL.
2:05	Slugg.	A word that describes the content. For example "budget".
2:07	Text status.	Used for example for "Ny version" ("New version").
2:10	Priority.	The priority of the content, lower value is more important, a value between 1 and 5.
2:12	Subject Reference.	According to the IPTC subject reference system.
2:22	Fix id.	For texts that occur repeatedly, for example TT-FLASH = FLA, or Vecko-PM = VPM.
2:25	Keywords	Used for terms like names and places.
2:40	Special.	Used to provide the recipients with information that is not to be published.
2:42	Action. "01" an earlier text shall be removed. "02" an earlier text shall be replaced. "03" an earlier text shall be appended to	If 2:42 is used then recordset 6:250 is used to state the Reference-UNO (se 1:100) for that/those texts that are concerned. <i>See recordset 6:250.</i>
2:105	Headline.	Headline from the text to simplify the making of lists in the receiving systems. <i>See also 2:120.</i>
2:115	Source.	Will mainly be used to give the source of press releases.
2:120	Extract.	Headline and the first 5-6 rows from the text. <i>See also 2:105</i>
2:122	Signatures.	The signature of the involved reporters and editing staff.
2:135	Language.	Optional. States the language code for the text. If the field is not there the language is Swedish.
-	EMBARGODATETIME	If the element is present it relays the date and time when the content is allowed to be published.
-	TAKE	Can be used to hold the number of an item in a series of takes.

## Description of the fields in recordset 2

<b>Version of IIM - Record 2</b>	<i>States the version of Record 2:xx in Information Interchange Model</i>	
<b>2:00</b>	Two figures. Only one occurrence.	
<b>Mandatory</b>	Example: 04	<RECV ER ID="2:00" VERN O="04">
<b>Comment:</b> Present version of IIM Recordset 2:xx is 04.		

<b>Text type</b>	<i>States the text type</i>	
<b>2:03</b>	Only one occurrence.	
<b>Mandatory</b>	Example: 01:PUBL	<TEXTTYP ID="2:03"> 01:PUBL</TEXTTYP>
<b>Comment:</b> States what kind of "text" the transmission is. 01:PUBL states a publishable text. 02:DATA states data (things like tables). 03:INFO states info material like editorial messages.		

Texttyp	Kod
Publishable text.	<b>01:PUBL</b>
Data that can be published but should not be edited.	<b>02:DATA</b>
Info that should not be published.	<b>03:INFO</b>

<b>Slugg</b>	<i>States the "slugg" (keyword)</i>	
<b>2:05</b>	Max 31 characters. Only one occurrence..	
<b>Mandatory</b>	Example: efterfr&aring;gan	<SLUG ID="2:05"> efterfr&aring;gan</SLUG>
<b>Comment:</b> Max 31 characters. To support receivers with Mac's that want to use the slugg as a filename. The slugg will be SGML encoded. Which - if å, ä or ö is used – will make it more than 31 characters during transmission. After conversion it should be max 31 characters.		

<b>Text status</b>	<i>States the status of the text</i>	
<b>2:07</b>	Max 64 characters. Only one occurrence.	
<b>Optional</b>	Example: Ny version, R&auml;ttad version, etc	<EDSTAT ID="2:07">Ny version</EDSTAT>
<p><b>Comment:</b> Below is a list over the different Text status codes that will be used. They are not written but chosen from a drop-down list so there should be no difference in spelling or so.</p> <p>Other Text status codes can eventually be added so it should be wise if the programs could deal with other codes as well.</p> <p>The text status field will be SGML encoded.</p>		

<b>Text status</b>
Ny version
Morgonversion
Förmiddagsversion
Eftermiddagsversion
Kvällsversion
Ny kvällsversion
Uppdaterad version
Nattversion
Sammanfattning
Rättad version
Korrekturfel
TT-Rättelse
Till redaktionen
Grafiktext
Bildtext
Faktaruta
Bakgrund
Begärd omsändning
Repetition
Inr-paket
Inr-paket2
Inr-kort
Inr-kort2
Utr-paket
Utr-paket2
Utr-kort
Utr-kort2

<b>Priority</b>	<i>States the importance</i>	
<b>2:10</b>	One figure, 1-5. Only one occurrence.	
<b>Optional</b>	Example: 4	<URG ID="2:10" PRIO="4">
<b>Comment:</b> Priority 1 and 2 should trigger some kind of alarm at the receiving site. According to IIM 1-8 could be used but TT will only use 1-5.		

<b>Priority</b>	<b>Meaning</b>
<b>1</b>	<b>Flash</b>
<b>2</b>	<b>Urgent</b>
<b>3</b>	<b>Important</b>
<b>4</b>	<b>Standard</b>
<b>5</b>	<b>Requested resend</b>

<b>SUBREF</b>	<i>States wich subject reference the text belongs to.</i>	
<b>2:12</b>	15 characters. Repeatable.	Can be used for selection and filtering at the receiving site
<b>Optional</b>	Example: TT:11000000:POL	<SUBREF ID="2:12"> TT:11000000:POL</SUBREF>
<b>Comment:</b> Always 15 characters. No Å, Ä or Ö. If more than category is chosen the complete field 2:12 is repeated for each category code. The six zeros can be used for subcategories in two levels of three figures each. Then there will be character combinations for these sub categories. TT will start using this for sport results. The figures on place 3-5 will state what sport we are dealing with and the last three figures will tell the level of the competition.		

**The following categories can exist:**

<b>Name</b>	<b>TT-code</b>
Konst, kultur och nöje (Art, culture and entertainment)	TT:01000000:KLT
Film (Movies)	TT:20000005:FLM
Mode (Fashion)	TT:20000011:MDE
Litteratur (Litterature)	TT:20000013:LIT
Musik (Music)	TT:20000018:MUS
Teater (Theatre)	TT:20000029:TEA
Television (Television)	TT:20000051:TEV
Brott, lag och straff (Crime, law and punishment)	TT:02000000:LAG
Katastrofer och olyckor (Catastrophes and accidents)	TT:03000000:OLY
Ekonomi, finans och affärer (Economy and business)	TT:04000000:EKO
Lantbruk (Agriculture and farming)	TT:20000210:AGR
Transport (Transportation)	TT:20000337:TRA
Konsumtionsvaror (Consumtion goods)	TT:20000243:KON
Privatekonomi (Private economy)	TT:20000285:PEK
Medier (Media)	TT:20000304:MDI
Utbildning (Education)	TT:05000000:UTB
Miljö och natur (Environmental issues)	TT:06000000:MLJ
Natur (Nature)	TT:20000441:NTR
Hälsa (Health)	TT:07000000:MED
Mänskligt (Human interest)	TT:08000000:HUM
Djur (Animals)	TT:20000500:DJR
Människor (People)	TT:20000502:MAN
Celebriteter (Celebrities)	TT:20000505:CEL
Kungligt (Royal families)	TT:20000506:ROY
Arbetsmarknad (Work)	TT:09000000:ARB
Fritid, lek och spel (Leisure time, games)	TT:10000000:FRI
Fritid (Leisure time)	TT:20000538:FRT

Hobby (Hobbies)	TT:20000550:HBY
Resor (Travel)	TT:20000563:RES
Motor (Motor)	TT:20000566:MTR
Mat (Food)	TT:20000568:MAT
Hem (Home)	TT:20000570:HEM
Politik (Politics)	TT:11000000:POL
Religion och tro (Religion and faith)	TT:12000000:REL
Teknik och vetenskap (Technic and science)	TT:13000000:TKN
Samhälle (Society)	TT:14000000:SOC
Sport (Sports)	TT:15000000:SPT
Krig, oro och konflikter (War, unrest and conflict)	TT:16000000:ORO
Väder (Weather)	TT:17000000:VDR

### Codes for sports

With sports results starting with code15 there will be further codes according to the plan below. So far only the IPTC acknowledged sports have received numbers but other sports will receive numbers as soon as possible.

SUBREF	IPTC explanation	TT-slugg
15001000	Aero and Aviation Sports	flygsport
15002000	Alpine Skiing	alpint
15003000	American Football	amfotboll
15004000	Archery	bågskytte
15005000	Athletics, Track & Field	friidrott
15006000	Badminton	badminton
15007000	Baseball	baseboll
15008000	Basketball	basket
15009000	Biathlon	skidskytte
15010000	Billiards, Snooker and Pool	biljard
15011000	Bobsleigh	bob
15012000	Bowling	bowling
15013000	Bowls & Petanque	boule
15014000	Boxing	boxning
15015000	Canoeing & Kayaking	kanot
15016000	Climbing	klättring
15018000	Curling	curling
15019000	Cycling	cykel
15020000	Dancing	danssport
15021000	Diving	simhopp
15022000	Equestrian	ridsport
15023000	Fencing	fäktning
15024000	Field Hockey	landhockey
15025000	Figure Skating	konståkning
15026000	Freestyle Skiing	freestyle
15027000	Golf	golf



15028000	Gymnastics	gymnastik
15029000	Handball (Team)	handboll
15030000	Horse Racing, Harness Racing	trav
15031000	Ice Hockey	ishockey
15033000	Judo	judo
15036000	Luge	rodel
15038000	Modern Pentathlon	modfemk
15039000	Motor Racing	bilsport
15040000	Motor Rallying	bilsport
15041000	Motorcycling	mcsport
15043000	Nordic Skiing	skidor
15044000	Orienteering	orientering
15046000	Power Boating	båtsport
15047000	Rowing	rodd
15048000	Rugby League	rugby
15049000	Rugby Union	rugby
15050000	Sailing	segling
15051000	Shooting	skytte
15052000	Ski Jumping	backhoppning
15053000	Snow Boarding	snowboard
15054000	Soccer	fotboll
15055000	Softball	baseboll (See 15007)
15056000	Speed Skating	skridsko
15057000	Speedway	mcsport (See 15041)
15059000	Squash	squash
15062000	Swimming	simning
15063000	Table Tennis	bordtennis
15064000	Taekwon-Do	taekwondo
15065000	Tennis	tennis
15066000	Triathlon	triathlon
15067000	Volleyball	volleyboll
15068000	Water Polo	vattenpolo
15069000	Water Skiing	vattenskidor
15070000	Weightlifting	tyngdlyftning
15071000	Windsurfing	segling (See 15050)
15072000	Wrestling	brottning
15074000	Rodeo	rodeo
15075000	Bangolf	bangolf
15076000	Bandy	bandy
15077000	Flying Disc	frisbee
15078000	Floorball	innebandy
15079000	Casting	casting
15080000	tug-of-war	dragkamp
15082000	Dog-racing	hundsport

Sports with no IPTC-number, so we have TT-specific:

15202000	budo
15205000	dövssport
15207000	gång

15208000	handikappidrott
15211000	kanotsegling
15212000	dyksport
15213000	skidorient
15214000	styrkelyft
15215000	trav
15216000	varpa
15300000	lott
15310000	spel
15320000	startlista
15330000	tips

## LEVEL CODES FOR THE SPORTS RESULT

The three last numbers states the level of the competition. The numbering scheme will not be continuous, there can be caps, but lower numbers will be used for more important competitions than high numbers.

Olympics	101
World championships	103
World champ qual.	105
World Cup	107
European championships	110
European champ qual.	113
European Cup	115
International	117
Foreign champ.	130
Foreign leagues	135
Foreign other	140
Swedish championships	150
Swedish cup	153
Swedish elite	157
Swedish leagues	159
Swedish regional	170
Swedish other	180
Non-competitive	190

All together this means that a subref for a sport result can look like this :

<SUBREF ID="2:12">TT:15054117:SPR</SUBREF>

15 means it is sports

054 means it is soccer

117 means it is international

<b>Fix ID</b>	<i>States an ID for texts that periodically occur.</i>	
<b>2:22</b>	Always 3 characters. Only one occurrence.	
<b>Optional</b>	Example: FLA	<FIXID ID="2:22">FLA</FIXID>
<b>Comment:</b> No Å, Ä or Ö. Fix-ID can ease the selection, search for or sorting of texts at the receiving site.		

<b>FIX-ID</b>	<b>KOD</b>
TT-FLASH	FLA
TT-BRÅDSKANDE	BRA
LANDVÄDER	LVD
SJÖVÄDER	SVD
FEMDYGN	FEM
TEMPERATURER	TEM
TILLRED	RED
TT-VECKO-PM	VPM
TT-INRIKES-PM	IPM
TT-UTRIKES-PM	UPM
TT-SPORT-PM	SPM
TT-UTR-FRAMTIDS-PM	UFP
TT-GRAFIK-PM	GRP
TT-EKO-VECKO-PM	EPM
TT-LÖPSEDEL	LOP
TT-GRAFIKLÖPSEDEL	GRA
TT-HELGTEXTLÖP	HTL
TT-HELGTEXT	HLG
TT-IPAKET	IPK
TT-UPAKET	UPK
TT-UIK	UIK
MARKNADEN	MAR
UTLANDSBÖRS	UTL
TT-INRKORT	IKO
TT-UTRKORT	UKO
TT-INRKORTISAR	IKK
TT-UTRKORTISAR	UKK
TTEKOKORTISAR	EKK
TT-GÖTEBORG-PM	GPM
TT-NORRLANDS-PM	NPM

TT-MALMÖ-PM	MPM
TT-FEATURE	TTF
TT-BILDTEXT	BTX
TTR-FAKTA	RFA
TTR-BAKGRUND	RBA
TTR-FAKTABAKGRUND	RFB
TT-TEST	TST
TT-FINANS	FIN
BÖRS	BOR
LINJEKONTROLL	LKO
TT-UTRIKESCITAT	UCI
TT-PRINTPAKET	PPK
TT-INRIKESCITAT	ICI
TT-PRINTCITAT	PCI
TT-UCITAT	UCI
TT-PRINTSIFFROR	PSI
TT-PRINTBILD-UTR	PBU
TT-PRINTBILD-INR	PBI
TT-ANALYS	LYS
TT-PROFIL	PRO
TT-KRÖNIKA	KRO
NOTIS	NTS
TEJK	TJK
RECENSION	RCS
NOTISPAKET-FEATURE	NKO

<b>Keyword</b>	<i>States keywords that can be used for search</i>	
<b>2:25</b>	Repeatable	
<b>Optional</b>	Example: Jens Byggmark	<KEYWORD ID="2:25"> PERSON=Jens Byggmark </KEYWORD>
<p><b>Comment:</b> Can contain SGML-enteties. From Februari 2015 TT uses KEYWORD to transmit terms found in the news story. It can be organizations, persons and places. It can also be geo data in which case i decimal WGS84 is used.</p> <p>&lt;KEYWORD ID="2:25"&gt;ORGANIZATION=FIS&lt;/KEYWORD&gt;</p> <p>&lt;KEYWORD ID="2:25"&gt;PERSON=Jens Byggmark&lt;/KEYWORD&gt;</p> <p>&lt;KEYWORD ID="2:25"&gt;LOCATION=Kitzb&amp;uuml;hel&lt;/KEYWORD&gt;</p> <p>&lt;KEYWORD ID="2:25"&gt;UNKNOWN=TT. Alpint&lt;/KEYWORD&gt;</p> <p>&lt;KEYWORD ID="2:25"&gt;GEODATA=47.444990,12.391430&lt;/KEYWORD&gt;</p>		

<b>Special</b>	<i>States information not for publishing.</i>	
<b>2:40</b>	Max 256 characters. Only one occurrence.	
<b>Optional</b>	Example: Utbyggd med fler uppgifter, bakgrund och citat	<SPECIAL ID="2:40">Utbyggd med fler uppgifter, bakgrund och citat</SPECIAL>
<p><b>Comment:</b> Can be used for information from TT to the customers. The text in Special will be SGML encoded.</p>		

<b>Action</b>	<i>States if an earlier text will be manipulated in any way.</i>	
<b>2:42</b>	Two figures. Only on occurrence.	01,02,03 or 04 is possible.
<b>Optional</b>	Example: 01	<ACTADV ID="2:42" ACTION="01">
<p><b>Comment:</b></p> <p>The code <b>01</b> corresponds to our old message: "The text TTAXXX is wrong and shall not be published". That is, the text <b>will not be replaced</b> by a new text. =<b>Kill</b>.</p> <p>The code <b>02</b> corresponds to our old message: "This text replaces TTAXXX that shall not be published". That is, the old text <b>will be replaced</b> with this new text. =<b>Replace</b>.</p> <p>The code <b>03</b> states that this text is an addition to an earlier sent text. =<b>Append</b>.</p> <p>The code <b>04</b> states that this text has a reference to another text. = <b>Reference</b>.</p> <p>The receivers might not wish to physically delete or replace a text but to have an alarm about that a text is erroneous and be able to take some action. Another possibility is to mark the earlier text so the users can see that a newer verison exists.</p> <p>The recordset 6:250 is used to create a reference UNO to identify the text/texts that are affected.</p>		

Action	Code
The text shall not exist any longer (object kill)	01

The text needs replacement (object replace)	02
New text to be added (object append)	03
Text references one or more other texts.	04

<b>Headline</b>	<b>The headline of the text</b>	
<b>2:105</b>	Max 60 characters. Only one occurrence.	
<b>Mandatory</b>	Example: Hotad domare lämnade rättegång	<HEADLINE ID="2:105">Hotad domare l&auml;mnade r&auml;tteg&aring;ng</HEADLINE>
<b>Comment:</b> The headline will be SGML encoded.		

<b>Source</b>	<b>Source for press releases</b>	
<b>2:115</b>	Max 32 characters. Only one occurrence.	
<b>Mandatory</b>		<HSOURCE ID="2:115">BIT</HSOURCE>
<b>Comment:</b> This will be TT for all TT-material. Can be used to indicate source of press releases sent by BIT/Waymaker or BusinessWire. TT Spektra uses TTS.		

<b>Extract</b>	<i>States the 256 first characters of the text.</i>	
<b>2:120</b>	Max 256 characters. Only one occurrence.	
<b>Mandatory</b>	Example: -	<CAPTION ID="2:120">Headline+some rows of text</CAPTION>
<b>Comment:</b> The extract consists of the the first 5-6 rows of text. The extract will be SGML encoded.		

<b>Signatures</b>	<i>States the signature of the reporter and the editor.</i>	
<b>2:122</b>	Max 32 characters. Repeatable.	
<b>Mandatory</b>	Example: rl ob	<WRITER ID="2:122"> rl ob</WRITER>
<b>Comment:</b> TT uses only two or three lettered signatures. All signatures will therefore exist in the same field 2:122. This means of course that this field not is repeated. The signatures are SGML encoded.		

<b>Language</b>	<i>The language the text is written in.</i>	
<b>2:135</b>	Max 3 characters. Only one occurrence.	
<b>Mandatory</b>	Example: en	<LANG ID="2:135">en</LANG>
<b>Comment:</b> This will for now be used to state if a pressrelease is in another language than swedish. For ordinary TT-texts the language is always swedish. The code follows the standard in ISO 639:1988, which today is two-lettered but is expected to become three-lettered.		



<b>Embargo</b>	<i>Date and time until when content is embargoed</i>	
-	According to xs:datetime	
<b>Optional</b>	Exempel:	<EMBARGODATETIME>2010-10-05T06:00:00+02:00</EMBARGODATETIME>
<b>Comment:</b> If EMBARGODATETIME is set for a transmission the content is not allowed to be published in any form or channel before the set date and time. Transmitting content with embargo is used to allow publishers to prepare newspapers that are printed and distributed after the date and time of embargo.		

<b>Take</b>	<i>Takenummer</i>	
-	Integer	
<b>Optional</b>	Exempel:	<TAKE>2</TAKE>
<b>Comment:</b> The element can be used to transmit the number this piece of content has in a series of pieces that are meant to be stacked together in numerical order. A series of take like this will sooner or later be followed by a new version.		

## Recordset 6

## Description of the fields in recordset 6

<b>Reference UNO</b>	<i>States the unique UNO for that or those texts that are about to be manipulated.</i>	
<b>6:250</b>	Shall be identical with the UNO 1:100 for the text that is affected.	
<b>Optional</b>	Example: 19971110:TT:0095:0	<REFUNO ID="6:250"> 19971110:TT:0095:0</REFUNO>
<b>Comment:</b> See 2:42 Action. More than one reference UNO can exist if more than one text is referenced.		

## Recordset 7

## Description of the fields in recordset 7

<b>Size mode</b>	<i>States if the size of the text is known or not.</i>	
<b>7:10</b>	A figure: 0 or 1. Max once.	
<b>Mandatory</b>	Example: 1	<SIZEMODE ID="7:10" SIZEMOD="1">
<b>Comment:</b> 0 states that the size is not known, 1 that it is known when transmission starts.		

<b>Max size</b>	<i>States the max size for the text in 8:10</i>	
<b>7:20</b>	A figure for the number of characters. Max once.	
<b>Mandatory</b>	Example: 3567	<MAXSUBSIZE ID="7:20">3567</MAXSUBSIZE>
<b>Comment:</b> The figure states the total size of the text, including SGML encoding and tags.		

<b>Net size</b>	<i>States the net size for the text</i>	
<b>7:90</b>	A figure for the number of characters.	
<b>Mandatory</b>	Example: 2345	<SIZEANNO ID="7:90">2345</SIZEANNO>
<b>Comment:</b> States the net size for the text, excluding SGML encoding and tags.		

<b>Metadata for Spektra</b>	<i>Special metadata for Spektra</i>	
	Contains departments and weeknumber	
<b>Optional</b>		<SPEKMETA><DEPARTMENTS><DEPARTMENT>Kultur</DEPARTMENT></DEPARTMENTS><WEEKNUMBER>48</WEEKNUMBER></SPEKMETA>
<b>Kommentar:</b> WEEKNUMBER is optional even with SPEKMETA present. Several DEPARTMENT can exist in one DEPARTMENTS.		

<b>Veckonummer</b>	<i>For which week this content is intended</i>	
	Week-number	
<b>Frivillig</b>		<WEEKNUMBER>48</WEEKNUMBER>
<b>Kommentar:</b> Used by TT Spektra where similar packages are produced each week.		

<b>Avdelning</b>	<i>TT Spektra-department</i>	
	Repeteable	
<b>Frivillig</b>		<DEPARTMENT>Kultur</DEPARTMENT>
<b>Kommentar:</b> One given TT Spektra transmission can contain several DEPARTMENT. Each points to a department in the Spektra system where this content belongs.		

<b>Avdelning, exempel</b>	<b>Kod</b>
Kultur	Kultur
Kulturnotis	Kulturnot
Nöje	Noje
Nöjenotis	Nojenot
Bling	Bling
Blingnotis	Blingnot
Filmrecension	Filmrec
Auto	EXTRAF_MOTOR
Familj och barn	FAMILJ
Bostad	EXTRAF_HEM
Dag för dag	DAGFORDAG
Dagens recept	DAGENSRECEPT
Dans mat	MAT
Elkes vin	EXTRAF_VIN
Frågeleken	FRAGELEKEN
GPmotor	GPMOTOR
Grattis	GRATTIS
Hälsa	HALSA
Hem och trädgård	HEM
Horoskop	HOROSKOP
Husdjur	HUSDJUR
Konsument	KONSUMENT

Barn	BARN
MåBra	EXTRAF_HALSA
Mias mat	EXTRAF_MAT
Modenyheter	MODENYHET
Motor	MOTOR
Motornyheter	MOTORNYHETER
Pengar	PENGAR
Prylar	PRYLAR
Reportage och porträtt	ALLMAN
Resor	RESOR
Respress	RESPRESS
Spel	SPEL
Sunes vin	VIN

**Recordset 8****Description of the fields in recordset 8**

<b>Body</b>	<i>The text itself</i>	
<b>8:10</b>	The text from TT, SGML encoded.	
<b>Mandatory</b>		<BODY ID="8:10">
<b>Comment:</b> Can contain a RUBBE if it is transmitted in the TT Online service. Main content is either one or more TEXT, FAKTATEXT, BAKGRUNDTEXT or a SPORTRES or a EKOTABELL.		

**Recordset 9****Description of the fields in recordset 9**

<b>End size</b>	<i>Confirms the net size of the text</i>	
<b>9:10</b>	A figure for the net size of the text. Max one occurrence.	
<b>Mandatory</b>	Example: 2345	<ENDSIZE ID="9:10">2345</ENDSIZE>
<b>Comment:</b> This figure shall be the same as 7:90.		

## **Programming guidelines**

It is desirable that functions for selection and sorting can be adjusted by the receiver so they can choose when they no longer want a certain type of material or when adding new type of material.

### **1:05 Destination**

It would be appropriate to use this field to be able to filter away resending to other customers than you're self because every customer have a unique code.

The appropriate receiving filter should be adjusted to let three codes through:

- ALL for texts meant for all customers.
- XXX for the appropriate geographical region.
- YYY for your own unique code.

### **1:50 Product ID**

This field is appropriate for selection. Some of these ID:s corresponds to the ones used in TT:s old format IPTC 7901.

Therefore it is easy to use this field to see that texts are sorted in corresponding directory structure as the old service.

It is also possible to combine this field with 2:12 Subref to select and filter in an even narrower way. For example it would be possible to select all domestic texts concerning technique.

### **2:10 Priority:**

Here one has the possibility to have an alarm function connected to priority 1 and 2.

### **2:12 Subref:**

Here it should be possible for the customer too easily change what categories too receive. This field is repeatable. See also 1:50 Product ID.

**2:22 Fix ID**

This is the field to look at if you want to make selections or routing based on type of material. Here we have groupings of certain material of repeatable type, for example the weather.

**2:40 Special**

The information in this field has only informative purposes for the customer and is not to be published.

**2:42 Action**

Action is one of the most exciting new features in the new format.

The information about what texts are concerned is sent in field 6:250 where you find the relevant UNO codes.

If you use these fields to create functionality where it is possible to really delete or replace texts, make it possible to turn it on or off.

Another possibility is to alarm, in some way, the editorial desk that an earlier text is affected.

One way of doing it is to put a remark in the old text. For example: *“this text has an update with number xxx”*.



## TT NITF

This is a description of the elements in TT-NITF – a SGML DTD – that we will use to mark up the content of an ordinary news text.

**All transmissions start with the following...**

```
SOH
<!DOCTYPE ttnitf SYSTEM "ttnitf.dtd">
<TTNITF>
```

**...and are finished with the following:**

```
<ENDSIZE ID="9:10">9999</ENDSIZE>
</TTNITF>
EOT
```

Where 9999 is just an example of the size of the transmitted file.

### Explanation of the SGML nomenclature

In a SGML DTD different characters are used to show how different elements occur in relation to each other etc.:

- , (**Comma**) – means that the elements must come in the order they are written.
- | (**Vertical bar**) – means that only one element in the group might exist.
- & (**Ampersand**) – means that the elements can exist in any order.

Every element can have a character that shows the allowed occurrence of the element. If nothing is said it means that the element must occur once and not more.

- ? (**Question mark**) states that the element is optional but maximum once.
- + (**Plus**) states that the element must occur at least once but can occur more than once.
- \* (**Star**) states that the element can occur no time, once or more times.

## Element in TT NITF

<!ELEMENT **text, faktatext,bakgrundtext** -- (rubrik?,dat?,ingress?,brodtext?,byline?,bild\*)>

The element <TEXT> and <FAKTATEXT> and <BAKGRUNDTEXT> can contain a headline, a dateline, an introduction, a text, a by-line and no, one or more picture references. Starting with version 2 of TT-NITF it is possible for the text block to be repeatable in the Body. This is because it must be able to contain news packages and packages of short texts.

<!ELEMENT **rubrik** -- (#PCDATA) >

A <TEXT> can contain an optional <RUBRIK> that has to come first. If there is a headline it will be max 60 characters long.

<!ELEMENT **dat** -- (ort,source) >

After <RUBRIK> there can be a <DAT> (date line) that has to contain an <ORT> and a <SOURCE>.

<!ELEMENT **ort** -- (#PCDATA) >

<ORT> contains the name of the city, for example <ORT>Stockholm</ORT>. Since February 2015 the element is used to store a leading word describing the content.

<!ELEMENT **source** -- (#PCDATA) >

The source reference is coded <SOURCE> and contains always TT but can from time to time contain other things. For example <SOURCE>TT-NTB<SOURCE>.

<!ELEMENT **ingress** -- (p+&citat\*) >

A <TEXT> can also contain an <INGRESS> which in that case must contain at least one <P>. But it can contain more than one <P> or <CITAT>.

<!ELEMENT **p** -- (#PCDATA) >

Both <INGRESS> and <BRODTEXT> can contain <P> that is individual pieces of text

<!ELEMENT **citat** -- (#PCDATA) >

As with <P> both <INGRESS> and <BRODTEXT> can contain <CITAT>. As with <P> it is a piece of text. <CITAT> is used for pieces that are direct quotations of persons.

<!ELEMENT **brodtext** -- (p+&citat\*&mellis\*&tabell\*&ul\*&fraga\*&svar\*)>

<BRODTEXT> just need to contain one <P>. That is because we have to be able to send a short text that might contain only a piece of the complete text.

Except <P> and <CITAT>, <BRODTEXT> can contain <MELLIS>, <UL>, <FRAGA>, <SVAR> and <TABELL>.

<!ELEMENT **mellis** -- (#PCDATA) >  
 <MELLIS> is an intermediate heading in <BRODTEXT>.

<!ELEMENT **fraga** -- (#PCDATA) >  
 <FRAGA> is a direct question in <BRODTEXT>.

<!ELEMENT **svar** -- (#PCDATA) >  
 <SVAR> is the answer to a question on the line above in <BRODTEXT>.

<!ELEMENT **ul** -- (li+) >  
 <UL> (unordered list) is a bulleted list according to what is used in both HTML and NITF.  
 Every bulleted list can contain one or more li (list items).

<!ELEMENT **li** -- (#PCDATA) >  
 <LI> is one bullet item in a bulleted list. Mostly used in fact summaries.

<!ELEMENT **tabell** -- (tr+) >  
 <!ELEMENT **tr** -- (th+|td+) >  
 <!ELEMENT **td** -- (#PCDATA) >  
 <!ELEMENT **th** -- (#PCDATA) >

<BRODTEXT> can also contain tables. These are small and minor tables and NOT sport tables or financial tables.

<TABELL> can contain any number of table rows <TR>.  
 Every <TR> can have any number of table head <TH> or table data <TD> .

<!ELEMENT **byline** -- (#PCDATA) >

A <TEXT> can also contain a <BYLINE> of the person/s that has written and edited the text.  
 Each BYLINE can have an attribute called EPOST which will contain the email-address to the writer of the article.

<!ELEMENT **bild** -- (bildfil,bildtext,bildskapare) >  
 <!ELEMENT **bildfil** -- (#PCDATA) >  
 <!ELEMENT **bildtext** -- (p+) >  
 <!ELEMENT **bildskapare** -- (#PCDATA) >

<TEXT> can finally contain any number of references to pictures <BILD> where every reference must contain one element for picture-name <BILDFIL>, one for picture caption <BILDTEXT> and one for picture creator <BILDSKAPARE>.

### Specially in the Web-service

The Web-service is produced according to TTNITF but will have an extra element first in <BODY>. The name of the element is <RUBBE>. It contains the short web-version of the text. The web-versions are distributed individually to each customer and can also be formatted individually. The RUBBE-element is never distributed in the print-service.

<!ELEMENT **rubbe** -- (rubberubrik,rubbetext)>

The web-version contain a web-headline and a short web-text-version. They are coded <RUBBERUBRIK> and <RUBBETEXT>. There will always be one of each. The RUBBE-element also has a number of attributes.

IDNR="" holds the id-number of this text. To obtain a unique id the date should be added.

REFNR="" is empty if this text does not replace an earlier web-news. It can contain one or more four digit numbers which indicate that this version replaces one or more earlier. If there are more than one replacements the numbers will be separated with spaces.

The web-categories is indicated with an abbreviation and the relative importance as a number.

Example ALLMI="3" says that it is a normal domestic news. ALLMU="2" says that it is a more important foreign news. A 0 says that it does not belong to this category. 1 is not used anymore but when it was used it meant that the news item was the most important regardless of category. A news item can belong to several web-categories.

List of web-categories:

ALLMI = General domestic.

ALLMU = General foreign.

EKO = Economy.

IT = It.

SPT = Sport.

SPEL = Gambling results.

KLT = Culture.

NOJ = Entertainment.

FRC = Moviereviews.

MDE = Fashion.

MTR = Cars

BNG = Bling.

<!ELEMENT **rubberubrik** -- (#PCDATA) >

<RUBBERUBRIK> the headline of the short web-version in <RUBBE>.

<!ELEMENT **rubbetext** -- (p) >

<RUBBETEXT> the short text in <RUBBE>. Always has one <P> </P>.

<!ELEMENT **sportres** - -(spgren,spvar?,spvad,blankrad?,(res\*|resepa\*|restab\*|serietab\*)) >

<!ELEMENT **spgren** - - (#PCDATA) >

Defines which sport it is. The same as the first part of the slugg.

<!ELEMENT **spvar** - - (#PCDATA) >

Tells where the event took place. Not mandatory.

<!ELEMENT **spvad** - - (#PCDATA) >

Tells which event it is. Sometimes it also says which division. <SPVAD> is often part two of the slugg. There is an attribute in <SPVAD> called FORTS which is "Ja" (Yes) or "Nej" (No) saying if this result is an addition to an earlier transmitted result.

SPVAD can also contain the attribute SERIEID that holds the ID-number for the league covered.

SPVAD can also contain the attribute SID which is unique to which season is covered. There can also be an attribute called SNAMN which states the season in readable characters.

Example: SID="19" SNAMN="2002-2003"

<!ELEMENT **blankrad** - O (EMPTY) >

An empty line. Has no meaning in TTNITF but is needed for conversion to the old format.

<!ELEMENT **res** - - (resvar?,resvad?,restxt) >

One result in one sport result file.

In the extended Olympic markup the RES can have an attribute RESID

<!ELEMENT **resvar** - - (#PCDATA) >

Tells where this individual result is from.

The geographical place can also be stated in the higher level SPVAR. If one competition is performed in several locations each partresult will have a RESVAR.

<!ELEMENT **resvad** - - (#PCDATA) >

Defines division etc for an individual result. This is given in addition to the overall definition in <SPVAD>.

As <SPVAD> also <RESVAD> contain an attribute called FORTS.

In the extended olympic markup the RESVAD is divided into RESSORT, RESTYP, RESDISCIPLINE and RESSTAGE.

RESSORT contains gender etc.

RESTYP contains information about individual, team etc.

RESDISCIPLINE contains information about the discipline within the sport.

RESSTAGE contains information about the stage the result describes.

<!ELEMENT **restxt** - - (p+) >

The actual result, possibly divided into several <P>.

In the extended olympic markup the resultats are separated for each PERSON. If the sport is a duel-type event a DUEL element holds two PERSON.

PERSON contains

PLAC with attributes MEDAL and QVAL. The element content is the ranking information. The attributes hold info if the rank also mean a medal or qualification to subsequent rounds.

NAME holds the name(s) of the contender(s).

COUNTRY holds the name of the country of the contender(s).

RESULT holds the result of the event for this PERSON. With an optional attribute for the result being some kind of record.

<!ELEMENT **resepa** - -

(epavar?, epavad?, hlag, blag, hres, bres, epaper?, epafakta?, epatext?)>

One result from a game between two teams.

Also includes the attributes :

MATCHID=

MATCHDATUM=

OMGNR=

MATCHID holds an ID-number for the match. MATCHDATUM is the date when the match was played in the format YYYYMMDD. OMGNR is the round the match belongs to. Matches from different rounds can therefore be presented in the same file

It can also have the attribute MATCHSLUT if the game was settled in extension or by shoot-out. It can have one of the values NORMAL, EXTRATID, STRAFF or LOTT. NORMAL is the default. EXTRATID means that the game was resolved during some type of extra time. STRAFF is shoot-out and LOTT if the game result was randomly drawn.

<!ELEMENT **epavar** - - (#PCDATA) >

Defines where one game was played. For “normal” swedish league play this information is not included since the names of the teams show that.

<!ELEMENT **epavad** - - (#PCDATA) >

Tells which division etc one game result belong to.

<!ELEMENT **hlag** - - (#PCDATA) >

Name of the home team.

Have an attribute LAGID that gives the ID-number for the team.

Can have an attribute MATCHPOINT which shows how many points the team got in this game. Normally 0,1,2 or 3. But if some sport decide on something else, new values might appear.

It can also have the attributes SERIEID, GRUPPID and KONFERENSID to show which serie, group or conference the team belong to. If these are missing, values higher up in the file is valid for each team.

<!ELEMENT **hres** - - (#PCDATA) >

Home team result.

<!ELEMENT **blag** - - (#PCDATA) >

Name of away-team.

Have an attribute LAGID that gives the ID-number for the team.

Can have an attribute MATCHPOINT which shows how many points the team got in this game. Normally 0,1,2 or 3. But if some sport decide on something else, new values might appear.

It can also have the attributes SERIEID, GRUPPID and KONFERENSID to show which serie, group or conference the team belong to. If these are missing, values higher up in the file is valid for each team.

<!ELEMENT **bres** - - (#PCDATA) >

Result of away-team.

<!ELEMENT **epaper** - - (#PCDATA) >

Halftime, etc results from the game.

<!ELEMENT **epafakta** - - (p+) >

Facts about the game divided into several <P>.

<!ELEMENT **epatext** - - (p+) >

Short text about the game in several <P>.

<!ELEMENT **restab** - - (tabrub?,tabell,tabinfo?) >

Small table, using the tabell-model from texts.

<!ELEMENT **tabrub** - - (#PCDATA) >

Headline for a small table.

<!ELEMENT **tabinfo** - - (p+) >

Information below a small table.

<!ELEMENT **serietab** -- (tabrub\*,thead?,(stab|splinje)\*,tabinfo?) >

Bigger sport tables with defined fields.

It can also have the attributes SERIEID, GRUPPID and KONFERENSID to show which serie, group or conference the team belong to.

<!ELEMENT **thead** -- (spher+) >

Header for sport tables.

<!ELEMENT **spher** -- (lag,hv?,hvs?,hvss?,ho?,hf?,hfs?,hfss?,hg?,hi?,bv?,bvs?,bvss?,bo?,bf?,bfs?,bfss?,bg?,bi?,sm,vm,vms?,vss?,om?,fm,fms?,fss?,gm,im,pt) >

Header row in sport tables.

<!ELEMENT **stab** -- (sptr+|splinje\*) >

Actual table in sport tables.

<!ELEMENT **sptr** -- (lag,hv?,hvs?

,hvss?,ho?,hf?,hfs?,hfss?,hg?,hi?,bv?,bvs?,bvss?,bo?,bf?,bfs?,bfss?,bg?,bi?,sm,vm,vms?,vss?,om?,fm,fms?,fss?,gm,im,pt) >

Table row in sport tables.

<!ELEMENT **splinje** - O EMPTY >

Empty element to indicate a line within a table. It has an attribute LVAD to define what type of line. Not implemented yet so it will always say "Annan" (Other).

<!ELEMENT **lag** -- (#PCDATA) -- Team name -->

Have an attribute LAGID that gives the ID-number for the team.

Can have an attribute MATCHPOINT which shows how many points the team got in this game. Normally 0,1,2 or 3. But if some sport decide on something else, new values might appear.

It can also have the attributes SERIEID, GRUPPID and KONFERENSID to show which serie, group or conference the team belong to. If these are missing, values higher up in the file is valid for each team.

<!ELEMENT **hv** -- (#PCDATA) -- Games won at home -->

<!ELEMENT **hvs** -- (#PCDATA) -- Games won at home after extended time -->

<!ELEMENT **hvss** -- (#PCDATA) -- Games won at home after penalty shooting -->

<!ELEMENT **ho** -- (#PCDATA) -- Draws at home -->

<!ELEMENT **hf** -- (#PCDATA) -- Games lost home -->

<!ELEMENT **hfs** -- (#PCDATA) -- Games lost home after extended time -->

<!ELEMENT **hfss** -- (#PCDATA) -- Games lost home after penalty shooting -->

<!ELEMENT **hg** -- (#PCDATA) -- Scored goals at home -->

<!ELEMENT **hi** -- (#PCDATA) -- Goals against at home -->

<!ELEMENT **bv** -- (#PCDATA) -- Games won away -->

<!ELEMENT **bvs** -- (#PCDATA) -- Games won away after extended time -->

<!ELEMENT **bvss** -- (#PCDATA) -- Games won away after penalty shooting -->

<!ELEMENT **bo** -- (#PCDATA) -- Draws away -->

<!ELEMENT **bf** -- (#PCDATA) -- Lost games away -->

<!ELEMENT **bfs** -- (#PCDATA) -- Lost games away after extended time -->

<!ELEMENT **bfss** -- (#PCDATA) -- Lost games away after penalty shooting -->

<!ELEMENT **bg** -- (#PCDATA) -- Scored goals away -->

<!ELEMENT **bi** -- (#PCDATA) -- Goals against away -->

<!ELEMENT **sm** -- (#PCDATA) -- Total played games -->

<!ELEMENT **vm** -- (#PCDATA) -- Won games total -->

<!ELEMENT **vms** -- (#PCDATA) -- Won games total after extended time -->

<!ELEMENT **vss** -- (#PCDATA) -- Won games total after penalty shooting -->

<!ELEMENT **om** -- (#PCDATA) -- Draw games total -->

<!ELEMENT **fm** -- (#PCDATA) -- Lost games total -->

<!ELEMENT **fms** -- (#PCDATA) -- Lost games total after extended time -->

<!ELEMENT **gm** -- (#PCDATA) -- Scored goals total -->

<!ELEMENT **fmss** -- (#PCDATA) -- Lost games total after extended time -->



<!ELEMENT **im** -- (#PCDATA) -- Goals against total -->  
<!ELEMENT **pt** -- (#PCDATA) -- Points total -->

<!ELEMENT **ekotabell** - -

(Rubrik?,Ingress?,Mellis?,Bhead,(FondF?,Option?,Mellis?,Blankrad?,Btab)+,Brodtext?) >  
Financial tables.

<EKOTABELL> has two attributes. The first, BTYP, says which collection of elements that is possible in this table. The second, BNR, is a unique number for each type of table.

<b>BNR</b>	<b>BTYP</b>	<b>SLUGG</b>
201	AKTIE	a1asmal
202	AKTIE	a1abred
203	AKTIE	a1bsmal
204	AKTIE	a1bbred
205	AKTIE	a1csmal
206	AKTIE	a1cbred
207	AKTIE	Olistansmal
208	AKTIE	Olistanbred
211	KON	konvertsmal
212	KON	konvertbred
213	TEO	optionersmal
214	TEO	optionerbred
215	AKTIE	otcsmal
216	AKTIE	otcbred
218	PRE	premielån
221	NUMF	nrföljder
222	HILO	högstlägstbetalt
223	AKTIE	sbismal
224	AKTIE	sbibred
241	OBL	oblbörssmal
242	OBL	oblbörsbred
250	OPT	aktieoptioner
252	OPT	pmxoptioner
401	FOND	fonder1smal
402	FOND	fonder1bred
403	FOND	fonder2smal
404	FOND	fonder2bred
410	INDEX	alfredbergsindex
412	INDEX	vaindex
414	INDEX	affärsvärldensindex
416	VAL	valuta
420	UTLAKT	tokyobörs
422	UTLAKT	frankfurtbörs
424	UTLAKT	zurichbörs
426	UTLAKT	amsterdambörs
428	UTLAKT	parisbörs
430	UTLAKT	londonbörs
432	UTLAKT	usaktiekurs
434	UTLAKT	usaktiekurs2
440	BORA	boräntor

These are financial tables used currently. New ones can be added which will mean new entries in this list.

<RUBRIK>, <INGRESS>, <MELLIS> and <BRODTEXT> are listed in the <TEXT>-part above.

For <BLANKRAD> see the section on sport tables.

<!ELEMENT **bhead** -- (Bhr+) >  
Header group with one or more header lines.

<!ELEMENT **fondf** -- (#PCDATA) >  
Name of "fondförvaltar"-company.

<!ELEMENT **option** -- (#PCDATA) >  
Name of one option in a option table.

<!ELEMENT **btab** -- (Btr+) >  
Financial table with one or more table rows.

<!ELEMENT **bhr** -- (%aktie;|%bora;|%fond;|%hilo;|%index;|%kon;|%numf;|%obl;|%opt;|%pre;|%teo;|%utlakt;|%val;) >  
One header line in a financial table.

<!ELEMENT **btr** -- (%aktie;|%bora;|%fond;|%hilo;|%index;|%kon;|%numf;|%obl;|%opt;|%pre;|%teo;|%utlakt;|%val;) >  
One table row in a financial table.

A common thing for <BTR> and <BHR> is that they can contain a group of element depending on the value of the BTYP-entity.

The list:

<!ENTITY % **aktie** "(hb?,ko?,lb?,ud?,da?,anamn,ch,bu,sa,bh?,bl?,bs,an?)">  
<!ENTITY % **bora** "(bnamn,vrr,vr2,vr5,vr10,brr,br2,br5,br10)">  
<!ENTITY % **fond** "(fnamn,nav,utd,utb,df1,df2?)">  
<!ENTITY % **index** "(inamn,va?,inx,dk?,ch)">  
<!ENTITY % **kon** "(ff?,kd?,ra?,di?,knamn,ch,bu,sa,bhk,blt?,kv?,no?)">  
<!ENTITY % **numf** "(ar,em,fe,hu,tj)">  
<!ENTITY % **obl** "(onamn,fd,ok,kr?,sk,sr?,ch?,br,bk,no?)">  
<!ENTITY % **opt** "(sl,inx,kk,sk,bso,vo)">  
<!ENTITY % **pre** "(pa,dr,ch,pk,sk,sb)">  
<!ENTITY % **hilo** "(hnamn,h11,h12)">  
<!ENTITY % **teo** "(thb?,la?,en?,tk?,tnamn,ch,bu,sa,bht,blt?,bst?)">  
<!ENTITY % **utlakt** "(unamn,ak,fk,df1?)">  
<!ENTITY % **val** "(va,ku,ch,ph)">

These are the individual elements of the financial tables. They contain data like name of stocks and bonds, notations from the stock market trading etc.

<!ELEMENT **ak** -- (#PCDATA) --->  
<!ELEMENT **an** -- (#PCDATA) --->  
<!ELEMENT **anamn** -- (#PCDATA) --->  
<!ELEMENT **ar** -- (#PCDATA) --->

<!ELEMENT **bh** -- (#PCDATA) --->  
<!ELEMENT **bht** -- (#PCDATA) --->  
<!ELEMENT **bhk** -- (#PCDATA) --->  
<!ELEMENT **bk** -- (#PCDATA) --->  
<!ELEMENT **bl** -- (#PCDATA) --->  
<!ELEMENT **blt** -- (#PCDATA) --->  
<!ELEMENT **blk** -- (#PCDATA) --->  
<!ELEMENT **bnamn** -- (#PCDATA) --->  
<!ELEMENT **br** -- (#PCDATA) --->  
<!ELEMENT **brr** -- (#PCDATA) --->  
<!ELEMENT **br2** -- (#PCDATA) --->  
<!ELEMENT **br5** -- (#PCDATA) --->  
<!ELEMENT **br10** -- (#PCDATA) --->  
<!ELEMENT **bs** -- (#PCDATA) --->  
<!ELEMENT **bsa** -- (#PCDATA) --->  
<!ELEMENT **bst** -- (#PCDATA) --->  
<!ELEMENT **bu** -- (#PCDATA) --->  
<!ELEMENT **ch** -- (#PCDATA) --->  
<!ELEMENT **da** -- (#PCDATA) --->  
<!ELEMENT **df1** -- (#PCDATA) --->  
<!ELEMENT **df2** -- (#PCDATA) --->  
<!ELEMENT **dk** -- (#PCDATA) --->  
<!ELEMENT **di** -- (#PCDATA) --->  
<!ELEMENT **dr** -- (#PCDATA) --->  
<!ELEMENT **em** -- (#PCDATA) --->  
<!ELEMENT **en** -- (#PCDATA) --->  
<!ELEMENT **fd** -- (#PCDATA) --->  
<!ELEMENT **fe** -- (#PCDATA) --->  
<!ELEMENT **ff** -- (#PCDATA) --->  
<!ELEMENT **fk** -- (#PCDATA) --->  
<!ELEMENT **fnamn** -- (#PCDATA) --->  
<!ELEMENT **hb** -- (#PCDATA) --->  
<!ELEMENT **hl1** -- (#PCDATA) --->  
<!ELEMENT **hl2** -- (#PCDATA) --->  
<!ELEMENT **hnamn** -- (#PCDATA) --->  
<!ELEMENT **ht** -- (#PCDATA) --->  
<!ELEMENT **hu** -- (#PCDATA) --->  
<!ELEMENT **inamn** -- (#PCDATA) --->  
<!ELEMENT **inx** -- (#PCDATA) --->  
<!ELEMENT **kd** -- (#PCDATA) --->  
<!ELEMENT **kk** -- (#PCDATA) --->  
<!ELEMENT **knamn** -- (#PCDATA) --->  
<!ELEMENT **ko** -- (#PCDATA) --->  
<!ELEMENT **kr** -- (#PCDATA) --->  
<!ELEMENT **ku** -- (#PCDATA) --->  
<!ELEMENT **kv** -- (#PCDATA) --->  
<!ELEMENT **la** -- (#PCDATA) --->  
<!ELEMENT **lb** -- (#PCDATA) --->  
<!ELEMENT **nav** -- (#PCDATA) --->  
<!ELEMENT **no** -- (#PCDATA) --->

<!ELEMENT **ok** -- (#PCDATA) -- -->  
<!ELEMENT **onamn** -- (#PCDATA) -- -->  
<!ELEMENT **pa** -- (#PCDATA) -- -->  
<!ELEMENT **ph** -- (#PCDATA) -- -->  
<!ELEMENT **pk** -- (#PCDATA) -- -->  
<!ELEMENT **ra** -- (#PCDATA) -- -->  
<!ELEMENT **sa** -- (#PCDATA) -- -->  
<!ELEMENT **sb** -- (#PCDATA) -- -->  
<!ELEMENT **sk** -- (#PCDATA) -- -->  
<!ELEMENT **sl** -- (#PCDATA) -- -->  
<!ELEMENT **sr** -- (#PCDATA) -- -->  
<!ELEMENT **thb** -- (#PCDATA) -- -->  
<!ELEMENT **tj** -- (#PCDATA) -- -->  
<!ELEMENT **tk** -- (#PCDATA) -- -->  
<!ELEMENT **tnamn** -- (#PCDATA) -- -->  
<!ELEMENT **ud** -- (#PCDATA) -- -->  
<!ELEMENT **unamn** -- (#PCDATA) -- -->  
<!ELEMENT **utb** -- (#PCDATA) -- -->  
<!ELEMENT **utd** -- (#PCDATA) -- -->  
<!ELEMENT **va** -- (#PCDATA) -- -->  
<!ELEMENT **vo** -- (#PCDATA) -- -->  
<!ELEMENT **vrr** -- (#PCDATA) -- -->  
<!ELEMENT **vr2** -- (#PCDATA) -- -->  
<!ELEMENT **vr5** -- (#PCDATA) -- -->  
<!ELEMENT **vr10** -- (#PCDATA) -- -->

**ISO Latin 1 SGML entities**

In SGML the Swedish letters å, ä and ö, for example, must be replaced with entities. This is the list over all letters and signs having entities. TT will not use all of them.

<b>Dec PC-850</b>	<b>Letter</b>	<b>Name</b>	<b>SGML code</b>	<b>RTF code</b>	<b>Dec MAC</b>
181	Á	Aacute	&Aacute;	c1	231
160	á	aacute	&aacute;	e1	135
182	Â	Acirc	&Acirc;	c2	229
131	â	acirc	&acirc;	e2	137
146	Æ	Aelig	&Aelig;	e6	174
145	æ	aelig	&aelig;	c6	190
183	À	Agrave	&Agrave;	c0	231
133	à	agrave	&agrave;	e0	136
143	Å	Aring	&Aring;	c5	129
134	å	aring	&aring;	e5	140
199	Ã	Atilde	&Atilde;	c3	204
198	ã	atilde	&atilde;	e3	139
142	Ä	Auml	&Auml;	c4	128
132	ä	auml	&auml;	e4	138
128	Ç	Ccedil	&Ccedil;	c7	130
135	ç	ccedil	&ccedil;	e7	141
144	É	Eacute	&Eacute;	c9	131
130	é	eacute	&eacute;	e9	142
210	Ê	Ecirc	&Ecirc;	Ca	230
136	ê	ecirc	&ecirc;	Ea	144
212	È	Egrave	&Egrave;	c8	133
138	è	egrave	&egrave;	e8	143
211	Ë	Euml	&Euml;	Cb	232
137	ë	euml	&euml;	Eb	145
214	Í	Iacute	&Iacute;	Cd	234
161	í	iacute	&iacute;	Ed	146
215	Î	Icirc	&Icirc;	Ce	235
140	î	icirc	&icirc;	Ee	148
222	Ì	Igrave	&Igrave;	Cc	237
141	ì	igrave	&igrave;	ec	147
216	Ï	Iuml	&Iuml;	cf	236
139	ï	iuml	&iuml;	ef	149
165	Ñ	Ntilde	&Ntilde;	d1	132
164	ñ	ntilde	&ntilde;	f1	150
224	Ó	Oacute	&Oacute;	d3	238
162	ó	oacute	&oacute;	f3	151
226	Ô	Ocirc	&Ocirc;	d4	239
147	ô	ocirc	&ocirc;	f4	153
227	Ò	Ograve	&Ograve;	d2	241
149	ò	ograve	&ograve;	f2	152
153	Ö	Ouml	&Ouml;	d6	133
148	ö	ouml	&ouml;	f6	154

Dec PC-850	Letter	Name	SGML code	RTF code	Dec MAC
229	Õ	Otilde	&Otilde;	d5	205
228	õ	otilde	&otilde;	f5	155
157	Ø	Oslash	&Oslash;	d8	175
155	ø	oslash	&oslash;	f8	191
225	ß	szlig	&szlig;		167
233	Ú	Uacute	&Uacute;	da	242
163	ú	uacute	&uacute;	fa	156
234	Û	Ucirc	&Ucirc;	db	243
150	û	ucirc	&ucirc;	fb	158
235	Ù	Ugrave	&Ugrave;	d9	244
151	ù	ugrave	&ugrave;	f9	157
154	Ü	Uuml	&Uuml;	dc	134
129	ü	uuml	&uuml;	fc	159
237	Ý	Yacute	&Yacute;	dd	
236	ý	yacute	&yacute;	fd	
152	ÿ	yuml	&yuml;	ff	216
		nbsp	&nbsp;		
38	&	amp	&amp;		38
		tstr	&tstr;		
60	<	less than	&lt;		60
62	>	great than	&gt;		62
227	Ð	ETH	&ETH;	d0	
228	ð	eth	&eth;	f0	
222	Þ	THORN	&THORN;	de	
254	þ	thorn	&thorn;	fe	

*nbsp* stands for Non Breaking Space and is used as a space between for example in numbers or names where you don't want a linebreak.

*tstr* stands for a dash that differs from the ordinary hyphen.

Ampersand & is encoded according to SGML to be able to separate it from when it really shall be used in the text as for example in, Pharmacia & Upjohn.

The signs for *greater than* and *less than* will not normally be used in TT material. They are included here if the need should arise.