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Olympic Data Feed

ODF Handball Data Dictionary

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TABLE OF CONTENT

1	Introduction	6
1.1	This document.....	6
1.2	Objective	6
1.3	Main Audience.....	6
1.4	Glossary	6
1.5	Related Documents.....	6
2	Overall Perspective	8
2.1	Objective	8
2.2	End to End data flow	8
3	Codes	9
4	Handball Data Extension	13
4.1	General Issues	13
4.1.1	ODF header	13
4.1.2	Attributes Definition.....	13
5	Point in Time.....	14
5.1	Point in Time Applicable Messages	14
5.1.1	List of participants by discipline/ List of participants by discipline update	16
5.1.1.1	Description.....	16
5.1.1.2	Header Values.....	16
5.1.1.3	Trigger and Frequency	16
5.1.1.4	Message Structure	16
5.1.1.5	Message Values	16
5.1.1.6	Message sort	18
5.1.2	List of teams by discipline/ List of teams by discipline update	19
5.1.2.1	Description.....	19
5.1.2.2	Header Values.....	19
5.1.2.3	Trigger and Frequency	19
5.1.2.4	Message Structure	19
5.1.2.5	Message Values	19
5.1.2.6	Message sort	20
5.1.3	Start List.....	21
5.1.3.1	Description.....	21
5.1.3.2	Header Values.....	21
5.1.3.3	Trigger and Frequency	21
5.1.3.4	Message Structure	21
5.1.3.5	Message Values	21
5.1.3.6	Message sort	22
5.1.4	Event Unit Results	23
5.1.4.1	Description.....	23
5.1.4.2	Header Values.....	23
5.1.4.3	Trigger and Frequency	23
5.1.4.4	Message Structure	23
5.1.4.5	Message Values	23
5.1.4.6	Message sort	36
5.1.5	Pool standings of group in a team competition.....	37
5.1.5.1	Description.....	37
5.1.5.2	Header Values.....	37



5.1.5.3	Trigger and Frequency	37
5.1.5.4	Message Structure	37
5.1.5.5	Message Values	37
5.1.5.6	Message sort	40
5.1.6	Event Final Ranking.....	41
5.1.6.1	Description.....	41
5.1.6.2	Header Values.....	41
5.1.6.3	Trigger and Frequency	41
5.1.6.4	Message Structure	41
5.1.6.5	Message Values	41
5.1.6.6	Message sort	42
5.1.7	Statistics.....	43
5.1.7.1	Description.....	43
5.1.7.2	Header Values.....	43
5.1.7.3	Trigger and Frequency	43
5.1.7.4	Message Structure	43
5.1.7.5	Message Values	43
5.1.7.6	Message sort	60
5.1.8	Brackets	61
5.1.8.1	Description.....	61
5.1.8.2	Header Values.....	61
5.1.8.3	Trigger and Frequency	61
5.1.8.4	Message Structure	61
5.1.8.5	Message Values	61
5.1.8.6	Message sort	62
5.1.9	Event's Medallists	63
5.1.9.1	Description.....	63
5.1.9.2	Header Values.....	63
5.1.9.3	Trigger and Frequency	63
5.1.9.4	Message Structure	63
5.1.9.5	Message Values	63
5.1.9.6	Message sort	63
5.1.10	Discipline/venue good morning.....	64
5.1.10.1	Description	64
5.1.10.2	Header Values	64
5.1.10.3	Trigger and Frequency	64
5.1.10.4	Message Structure	64
5.1.10.5	Message Values.....	64
5.1.10.6	Message sort.....	64
5.1.11	Discipline/venue good night.....	65
5.1.11.1	Description	65
5.1.11.2	Header Values	65
5.1.11.3	Trigger and Frequency	65
5.1.11.4	Message Structure	65
5.1.11.5	Message Values.....	65
5.1.11.6	Message sort.....	65
5.1.12	Discipline configuration.....	66
5.1.12.1	Description	66
5.1.12.2	Header Values	66
5.1.12.3	Trigger and Frequency	66
5.1.12.4	Message Structure	66
5.1.12.5	Message Values.....	66
5.1.12.6	Message sort.....	67
6	Real time	68
6.1	Real Time Applicable Messages	68
6.1.1	RT Event Unit Results	69



6.1.1.1	Description.....	69
6.1.1.2	Header Values.....	69
6.1.1.3	Trigger and Frequency	69
6.1.1.4	Message Structure	69
6.1.1.5	Message Values	70
6.1.1.6	Message sort	82
6.1.2	RT Clock	83
6.1.2.1	Description.....	83
6.1.2.2	Header Values.....	83
6.1.2.3	Trigger and Frequency	83
6.1.2.4	Message Structure	83
6.1.2.5	Message Values	83
6.1.2.6	Message sort	83
7	PDF feed.....	84
7.1	PDF Applicable Messages	84
7.1.1	DT PDF	85
7.1.1.1	Description.....	85
7.1.1.2	Header Values.....	85
7.1.1.3	Trigger and Frequency	85
7.1.1.4	Message Structure	85
7.1.1.5	Message Values	85
7.1.1.6	Message sort	85
	DOCUMENT CONTROL	86



1 Introduction

1.1 This document

This document includes the ODF Handball Data Dictionary. This Data Dictionary refines the messages described in the ODF Central Messages Interface Document and ODF Sport Messages Interface Document specifically for Handball, as well as defines the codes used in these messages.

1.2 Objective

The objective of this document is to provide a complete and formal definition of the ODF Handball Data Dictionary, with the intention that the information message producer and the message consumer can successfully interchange the information as the Handball competition is run.

1.3 Main Audience

The main audience of this document is the IOC as the ODF promoter, ODF users such as the World News Press Agencies, Rights Holding Broadcasters and International Sports Federations.

1.4 Glossary

The following abbreviations are used in this document

- **HB** – Handball
- **IF** – International Federation
- **IOC** – International Olympic Committee
- **NOC** – National Olympic Committee
- **ODF** – Olympic Data Feed
- **ODF-RT** – Olympic Data Feed Real Time
- **RSC** – Results System Codes
- **WNPA** – World News Press Agencies

1.5 Related Documents

Document Reference	Document Title	Document Description
ODF/INT001	ODF Message Transmission Document	This document describes the technical standards to be used to transfer ODF messages between the message



Document Reference	Document Title	Document Description
		generators and the final ODF users
ODF/COD001	ODF Common Codes Document	This document describes the ODF codes used across the rest of the ODF documents
ODF/INT003	ODF Central Messages Interface Document	This document describes the ODF central messages
ODF/INT004	ODF Sport Messages Interface Document	This document describes the ODF sport messages, generated independently by each sport



2 Overall Perspective

2.1 Objective

The objective of this document is to focus on the formal definition of the ODF Handball Data Dictionary.

2.2 End to End data flow

The general rules as described in the documents referenced in the section 1.5 will have to be considered for a complete and formal definition. It is especially important the ODF Central Messages Interface Document and ODF Sport Messages Interface Document, since this ODF Handball Data Dictionary is a particularization of those documents.

In the following sections, for each ODF sport message it will be explained in further detail those elements, attributes, codes, ODF header, the trigger and frequency for each message generation, as well as the sort of the message that are particular in the case of Handball.

Any ODF Handball message should follow all the previous definitions in order to be considered as an ODF compliant message.



3 Codes

Several codes are used in the definition of the messages in this document. Any code will be referenced the following way:

CC @CodeEntity

CodeEntity is the name of the entity that identifies a particular set of codes.

The following table describes the codes entities used in document sorted by name, indicating whether the set of values can be found in the ODF Common Codes Document, or listed in the table itself, otherwise. Please refer to ODF Sport Messages Interface Document to know the format of these codes.

Code Entity	Code Entity Set of Values	
CC @Action	Code	Description
	CAU	Warning (Yellow card)
	EXC	Disqualification (Red card) with Report
	EXP	Disqualification (Red card)
	G	Goal
	GKS	Goalkeeper Substitution
	PFP	7m caused (Personal foul penalty)
	RFP	7m received (Received foul penalty)
	SHT	Shot
	SRT_GK	Starting Goalkeeper
	ST	Steal
	STARTP	Start of Period (only for RT)
	TBP	Team/Bench 2 minute suspension
	TCAU	Team/Bench warning (Yellow card)
	TEXC	Team/Bench disqualification (Red card) with report
	TEXP	Team/Bench disqualification (Red card)
	TO	Turnover
	TFT	Turnover bench/team
	TMS	2 min. suspension ("T" to be interpreted as "time" instead of "two")
	TOUT	Time Out
	TPT	2+2 min. suspension
CC @ActionRole	Code	Description
	ASS	Assists
	SCR	Scorer
	IN	In
	OUT	Out
CC @Bracket	Code	Description
	FNL	Finals
CC @BracketItems	Code	Description
	FNL	Finals



Code Entity	Code Entity Set of Values	
	QFL	Quarterfinals
	SFL	Semi-finals
CC @CompetitorPlace	Code	Description
	UNK	The competitor is not known yet
CC @Country	Defined in ODF Common Codes Document See entity Country <ul style="list-style-type: none"> The entity's attribute to be used is Code 	
CC @Desc	Code	Description
	10	Group A
	11	Group B
	0	Lost
	1	Won
CC @DestType	Code	Description
	BC	Bottom Centre
	BL	Bottom Left
	BR	Bottom Right
	MC	Middle Centre
	ML	Middle Left
	MR	Middle Right
	TC	Top Centre
	TL	Top Left
	TR	Top Right
CC @EntryStatus	Code	Description
	DSQ	Disqualified
	RP	Replaced
CC @Function	Defined in ODF Common Codes Document See entity Function <ul style="list-style-type: none"> The entity's attribute to be used is Code <u>In case of officials in DT_START_LIST use:</u> For Official@Function use: RE Referee RR Reserve Referee SK Scorekeeper TK Timekeeper IF17 Technical Official	
CC @GameStatus	Code	Description
	CN	Cancelled
	SP	Suspended
CC @Hand	Code	Description
	L	Left
	R	Right
CC @IRM	Code	Description
	DSQ	Disqualified



Code Entity	Code Entity Set of Values	
	S	Suspended
CC @Organisation	Defined in ODF Common Codes Document	
	See entity Organisation <ul style="list-style-type: none"> The entity's attribute to be used is Code 	
CC @Period	Code	Description
	H1	first half Score
	H2	second half Score
	OT1	first extra time Score
	OT2	second extra time Score
	PSO	Penalty shoots out.
CC @PeriodNo	Code	Description
	0	For the totals
	1	H1
	2	H2
	3	OT1
	4	OT2
CC @PeriodStatus	Code	Description
	E	End Match
	R	Running
	S	Break
CC @Position	Code	Description
	CB	Centre Back
	GK	Goalkeeper
	LB	Left Back
	LW	Left Wing
	P	Pivot
	RB	Right Back
	RW	Right Wing
CC @ResultType	Code	Description
	IRM_POINTS	For both, Points and invalid result mark
	POINTS	Goals
CC @ShotPosition	Code	Description
	BT	Breakthrough
	CSD	Centre 6m
	CLD	Centre 9m
	FB	Fast Break
	LLD	Left 9m
	LSD	Left 6m
	LW	Left Wing
	PTY	Penalty shot
	RLD	Right 9m
	RSD	Right 6m
	RW	Right Wing
CC @ShotType	Code	Description



Code Entity	Code Entity Set of Values	
	B	Blocked
	F	Fault
	M	Missed
	P	Post
	S	Saved
CC @Statistics	Code	Description
	CUM	Cumulative Statistics of team and individual
	IND_RANKING	Ranking of Individual tournament statistics (for the best athletes)
	TEAM_RANKING	Ranking of Team tournament statistics
	TOU	Tournament Statistics
CC @WLT	Code	Description
	L	Lost
	T	Tie
	W	Won



4 Handball Data Extension

4.1 General Issues

The following sections extend and complete the information to be sent in each of the messages for this particular discipline, if some particularization is needed. If there are special considerations for any of the message types that have to be sent for this discipline, then they should be considered in the following sections. If nothing is mentioned for a particular message type, then the general rules, as defined either in the ODF Central Messages Interface Document or ODF Sport Messages Interface Document, should be respected for the messages described in the chapter 4 of this document.

4.1.1 ODF header

Regarding to the ODF header values, you should also follow the description in the ODF Central Messages Interface Document or ODF Sport Messages Interface Document. However, the following attributes could be refined for each message type regarding to the header values:

- ODF Header: DocumentCode.

4.1.2 Attributes Definition

The attributes types are explained in the section “5.1.2 Attributes Definition” of the ODF Central Messages Interface Document. Please, refer to that document for further information



5 Point in Time

5.1 Point in Time Applicable Messages

The following table is a full list of all ODF messages and describes the list of messages used in Handball, as well as the category of each message, which identifies if the message structure definition can be found either in the ODF Sport Messages Interface Document or ODF Central Messages Interface Document.

- The column “Message type” indicates the DocumentType that identifies a message
- The column “Message name” is the message name identified by the message type
- The column “Message documented” indicates the document where you should go to have the general definition for a particular Message type
- The column “Message used in this sport” indicates whether a message is used in particular for this sport or not. If it is not ticked (X), then the message should not be used for this sport.
- The column “Message extended in this document” indicates whether a particular message has extended definition in regards to those that are general for all sports. Any message ticked (X) in this column should also be ticked in the “Message used in this sport column”. If one message has extended definition, it should be considered both, the extensions as well as the general rules for one message that is used in the case of the sport. However, if one particular message is not extended, then it should follow the general definition rules.

Message Type	Message name	Message documented	Message used in this sport	Message extended in this document
DT_SCHEDULE	Competition schedule	Central	X	
DT_SCHEDULE_UPDATE	Competition schedule update	Central	X	
DT_PARTIC	List of participants by discipline	Central	X	X
DT_PARTIC_UPDATE	List of participants by discipline update	Central	X	X
DT_PARTIC_TEAMS	List of teams	Central	X	X
DT_PARTIC_TEAMS_UPDATE	List of teams update	Central	X	X
DT_PARTIC_HORSES	List of equestrian horses	Central		
DT_PARTIC_HORSES_UPDATE	List of horses update	Central		
DT_MEDALS	Medal standings	Central	Global	
DT_MEDALLISTS_DAY	Medallists of the day	Central	Global	
DT_HISTORIC_RECORD	Historical records	Central		
DT_HIST_REC_UPDATE	Historical records update	Central		
DT_GLOBAL_GM	Global good morning	Central	Global	
DT_GLOBAL_GN	Global good night	Central	Global	



Message Type	Message name	Message documented	Message used in this sport	Message extended in this document
DT_START_LIST	Start List	Sports	X	X
DT_RESULT	Event Unit Results	Sports	X	X
DT_PHASE_RESULT	Phase Results	Sports		
DT_CUMULATIVE_RESULT	Cumulative Results	Sports		
DT_POOL_STANDING	Pool Standings of group in a team competition	Sports	X	X
DT_RANKING	Event Final ranking	Sports	X	X
DT_STATS	Statistics table	Sports	X	X
DT_MEDALLISTS	Medallists of one event	Sports	X	X
DT_MEDALLISTS_DISCIPLINE	Medallists by discipline	Sports	X	
DT_RECORD	Records	Sports		
DT_COMMUNICATION	Official Communication	Sports	X	
DT_BRACKETS	Brackets	Sports	X	X
DT_GM	Discipline/venue good morning	Sports	X	X
DT_GN	Discipline/venue good night	Sports	X	X
DT_FED_RANKING	Federation Ranking	Sports		
DT_CONFIG	Discipline Configuration	Sports	X	X
DT_WEATHER	Event Unit Weather conditions	Sports		
DT_SERIAL	List of Current PiT Serial	Sports	X	



5.1.1 List of participants by discipline/ List of participants by discipline update

5.1.1.1 Description

This message is the List of participants by discipline (and the update), for that discipline it is the list of athletes, and officials, as described in the ODF Central Messages Interface Document.

5.1.1.2 Header Values

The definition in the ODF Central Messages Interface Document is valid

5.1.1.3 Trigger and Frequency

The definition in the ODF Central Messages Interface Document is valid.

5.1.1.4 Message Structure

The optional elements defined for this message in the ODF Central Messages Interface Document that should be included in the case of Handball are:

- Participant /Discipline /RegisteredEvent /EventEntry

In the next section (message values), there is a more detailed definition.

5.1.1.5 Message Values

The following table lists the “List of participants by discipline/ update” optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Participant	GivenName	M	S(25)	Given name in WNPA format (mixed case)
	BirthDate	O	YYYYMMDD	Date of birth for the athlete
	Height	O	N(3) 999	Height in centimetres for the athlete Send when this information is available
	Weight	O	N(3) 999	Weight in kilograms for the athlete Send when this information is available
	MainFunctionId	M	CC @Function	Main function
Participant /Discipline /RegisteredEvent	Bib	O	String	Uniform number for the athlete. Although this attribute is optional, it will be updated and informed as soon as it is known. Example: 1, 2

The following table describes in more detail the Participant /Discipline /RegisteredEvent /EventEntry element for the athletes in the case of Handball.

Element: Participant /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
E_ENTRY	E_CAPTAIN		S(1)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Send “Y” if the competitor is the Captain, “N” just if the value of the attribute has changed.
	E_IRM		S(3)	For @Type: Send proposed type
				For @Code: Send proposed code



Element: Participant /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
				For @Value: When the athlete has been disqualified. Send DSQ
	E_SUBSTITUTE		S(1)	For @Type: Send proposed type
				For @Code: Send proposed type code
				For @Pos: Do not send anything
				For @Value: Send "Y" if the competitor is an alternate player, "N" just if the value of the attribute has changed.
	E_POSITION	N(1) 0	CC @Position	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send 1 or 2 to allow up to two positions. Use 1 for the main position
				For @Value: Position in the team.
	E_HAND		CC @Hand	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Handedness for the athlete.
	E_CLUB_NAME		S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Club name
	E_CLUB_CITY		S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Club City
	E_CLUB_ORG		CC @Country	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Club Country Code
	E_INT_GAMES_P		N(3) 990	For @Type: Send proposed type



Element: Participant /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: International matches played.
	E_INT_GOALS		N(3) 990	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: International matches goals.

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
E_ENTRY /E_CAPTAIN	Captain	Send the code just for the captain (this information only will be sent in the update message)
E_ENTRY /E_IRM	Athlete's status in the team (Disqualified)	As soon as it is known (this information only will be sent in the update message) Only send for DSQ athletes
E_ENTRY /E_SUBSTITUTE	Substitute	As soon as this information is available (this information can be sent in both messages)
E_ENTRY /E_POSITION	Position in the team.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_HAND	Handedness for the athlete.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_CLUB_NAME E_ENTRY /E_CLUB_CITY E_ENTRY /E_CLUB_ORG	The name, city and country from the Club player.	As soon as it is known (this information only will be sent in the update message)
E_ENTRY /E_INT_GAMES_P E_ENTRY /E_INT_GOALS	International matches played/goals.	As soon as it is known (it can be sent in both messages)

5.1.1.6 Message sort

Please, follow the general definition.



5.1.2 List of teams by discipline/ List of teams by discipline update

5.1.2.1 Description

This message is the List of teams by discipline (and the update) as described in the ODF Central Messages Interface Document.

5.1.2.2 Header Values

The definition in the ODF Central Messages Interface Document is valid

5.1.2.3 Trigger and Frequency

The definition in the ODF Central Messages Interface Document is valid.

5.1.2.4 Message Structure

The optional elements defined for this message in the ODF Central Messages Interface Document that should be included in the case of Handball are:

- Team /TeamOfficials /Official
- Team /Discipline /RegisteredEvent /EventEntry

In the next section (message values), there is a more detailed definition.

5.1.2.5 Message Values

The following table lists the “List of teams by discipline/ update” optional attributes (defined in the ODF Central Messages Interface Document) that are used in the case Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Team /TeamOfficials /Official	Function	M	CC @Function	Official's function for the team

The following table describes in more detail the Team /Discipline /RegisteredEvent /EventEntry element in the case of Handball.

Element: Team /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
E_ENTRY	E_SHIRT	N(1) 0	S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send 1, 2, 3 to indicate the number of shirt
				For @Value: Colour's Shirt
	E_SHORTS	N(1) 0	S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send 1, 2, 3 to indicate the number of shorts
				For @Value: Colour's Shorts
	E_GK_SHIRT	N(1) 0	S(25)	For @Type: Send proposed type
				For @Code:



Element: Team /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
				Send proposed code
				For @Pos: Send 1, 2, 3 to indicate the number of shirt
				For @Value: Colour's Shirt for Goalkeeper
	E_GK_SHORTS	N(1) 0	S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send 1, 2, 3 to indicate the number of shorts
				For @Value: Colour's Shorts for Goalkeeper
	E_GROUP		S(1)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Preliminary Group of the team
	E_SEED		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
				For @Value: Seed number.

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
E_ENTRY /E_SHIRT	1 st /2 nd / 3 rd team shirt colour.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_SHORTS	1 st /2 nd / 3 rd team shorts colour.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_GK_SHIRT	1 st /2 nd / 3 rd shirt colour for Goalkeeper.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_GK_SHORTS	1 st /2 nd / 3 rd shorts colour for Goalkeeper.	As soon as it is known (it can be sent in both messages)
E_ENTRY /E_GROUP	Preliminary Group of the team	As soon as this information is known (it can be sent in update message)
E_ENTRY /E_SEED	Seed number	As soon as it is known (it can be sent in update message)

5.1.2.6 Message sort

Please, follow the general definition.



5.1.3 Start List

5.1.3.1 Description

This message is the Start List message as described in the ODF Sport Messages Interface Document.

5.1.3.2 Header Values

The DocumentCode attribute in the ODF header will be sent according to the ODF Common Codes document (header values sheet).

5.1.3.3 Trigger and Frequency

Please, follow the general definition

5.1.3.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- UnitInfos /UnitDateTime (following the general rules for this element)
- Officials /Official
- Start /Competitor /Coaches /Coach
- Start /Competitor /Composition /Athlete /EventUnitEntry

In the next section (message values), there is a more detailed definition.

5.1.3.5 Message Values

The following table lists the Start List optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Officials /Official	Function	M	CC @Function	Send according to the codes.
	Order	M	Numeric	Send by order for each official in each function, for example: Referee(s) followed by Reserve Referee(s), if more than one referees then sort by name.
Start	StartOrder	M	Numeric	Send 1 for Home team, send 2 for Away team.
	SortOrder	M	Numeric	
Start /Competitor /Coaches /Coach	Function	M	CC @Function	Coach function
	Order	M	Numeric	Send 1 if just one coach, sequential number if more than one (order as they are presented on NOC entry form)
Start /Competitor /Composition /Athlete	Bib	M	String	Uniform number.
	Order	M	N(3) 990	

The following table describes in more detail the Start /Competitor /Composition /Athlete /EventUnitEntry element in the case of Handball.

Element: Start /Competitor /Composition /Athlete /EventUnitEntry			
Type	Code	Value	Description
EUE_HB	HB_IRM	CC @IRM	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value:



Element: Start /Competitor /Composition /Athlete /EventUnitEntry			
Type	Code	Value	Description
			Athlete's status in the team. When the athlete has been Suspended.
	HB_CAPTAIN	S(1)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send "Y" if the competitor is the Captain.

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
EUE_HB /HB_IRM	To know if the athlete was Suspended	As soon as it is known
EUE_HB /HB_CAPTAIN	Captain indicator	Send the code just for the captain

5.1.3.6 Message sort

Please, follow the general definition.



5.1.4 Event Unit Results

5.1.4.1 Description

This message is the Event Unit Results message as described in the ODF Sport Messages Interface Document.

5.1.4.2 Header Values

The DocumentCode attribute in the ODF header will be sent according to the ODF Common Codes document (header values sheet).

5.1.4.3 Trigger and Frequency

Please, follow the general definition, taking also into account the following

- After each period (half), the message should be sent for intermediate results.
- After last extra time or shoot-out (if any), the message should be sent for intermediate results.
- After the match (unit).

5.1.4.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- UnitInfos /UnitDateTime (following the general rules for this element)
- UnitInfos /UnitInfo
- Periods /Period
- UnitActions /UnitAction
- UnitActions /UnitAction /ExtendedAction
- UnitActions /UnitAction /Competitor(following the general rules for this element)
- UnitActions /UnitAction /Competitor /Composition /Athlete (following the general rules for this element)
- Result /Competitor /Stats /Stat
- Result /Competitor /Stats /Stat /ExtendedStat
- Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult
- Result /Competitor /Composition /Athlete /Stats /Stat
- Result /Competitor /Composition /Athlete /Stats /Stat /ExtendedStat

5.1.4.5 Message Values

The following table lists the Event Unit Results optional and/or extended attributes (defined in the ODF Sport Messages Interface Document), as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Periods /Period	Code	M	CC @Period	Times, usually there are 2 half times.
	HomeScore	M	N(2) 90	Overall score of the home competitor at the end of the period.



Element	Attribute	M/O	Value	Comments
	AwayScore	M	N(2) 90	Overall score of the away competitor at the end of the period
	HomePeriodScore	M	N(2) 90	Score of the home competitor just for that period.
	AwayPeriodScore	M	N(2) 90	Score of the away competitor just for that period.
UnitActions /UnitAction	Time	M	MM:SS 99:90	Time in minutes and seconds in which the action occurred.
	Status	M	N	Status of the action for indicate if the action is new (N)
UnitActions /UnitAction /Competitor /Composition /Athlete	Role	O	CC @ActionRole	Role of the player in the action, according to the available codes. It is specified in the codes sections which roles should be used for which actions.
Result	ResultType	M	CC @ResultType	Result type, either goals or IRM with points for the corresponding event unit.
	IRM	O	CC @IRM	IRM of the Team for the particular event unit. A team may be disqualified from the tournament due to breach of sport ethics, rules, etc Send just in the case @ResultType both Points and IRM (see codes section)
	Result	O	N(2) 90	Result (totals goals in that game) of the Team for the particular event unit.
	WLT	O	CC @WLT	The code whether a competitor won or lost.
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the Home team (1) and the Away team (2)
Result /Competitor/ EventUnitEntry	Code	M	E_HOME or E_AWAY	Key of the EventUnitEntry to uniquely identify if the Competitor is the Home or the Away Team
Result /Competitor /Composition /Athlete	Order	M	Numeric	Sort by Uniform number

The following table describes in more detail the UnitInfos /UnitInfo element in the case of Handball.

Element: UnitInfos /UnitInfo			
Type	Code	Value	Description
UI_HB	HB_ATTENDANCE	N(7) 999,990	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Number of spectators at the match

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
UI_HB /HB_ATTENDANCE	Number of spectators at the match	Send just if it is available

The following table describes in more detail the UnitActions /UnitAction element in the case of Handball.



Element: UnitActions /UnitAction				
Type	Code	Pos	Value	Description
UAC_HB	CC @Period	N(3) 990	CC @Action	For @Type: Send proposed type
				For @Code: Send one period code.
				For @Pos: Unique sequential number for all the actions of the period, from 1 to n (from the first action of the Period to the last one).
				For @Value: Send one action code

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
UAC_HB /CC @Period	Actions in the game. If only one team is involved in the action there will be just one element Action. For Goal action send two Athletes Elements: 1st Scorer, 2nd Assist (@ActionRole=ASS). Just, if the Assist information available.	2 minutes after the results of the match are approved.

The following table describes in more detail the UnitActions /UnitAction /ExtendedAction element in the case of Handball.

Element: UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
EA_HB	HB_SCR_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Home team score of the game after the action or score only for Penalty ShootOut period.
	HB_SCR_A	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Away team score of the game after the action or score only for Penalty ShootOut period.
	HB_LEAD_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Difference between the numbers of goals for the Home Team Use + for home team lead, and - for visitor team lead
	HB_LEAD_A	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Difference between the numbers of goals for the Away



Element: UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
	HB_WIN	S(1)	team. Use - for home team lead, and + for visitor team lead
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_DEST_TYPE	CC @DestType	For @Value: Send H if the Home Team Send A if the Away Team
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_SHOT_TYPE	CC @ShotType	For @Value: Shot destination: Top Left, Top Right ..., and Bottom Left. In case of goal or shots saved. (see codes section)
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_SHOT_POS	CC @ShotPosition	For @Value: Description for not successful shots: Missed, Post, blocked, Saved. Just in case Shot (see codes section)
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_SHOT_POS	CC @ShotPosition	For @Value: Position, from where the shot did: Left 6m ..., Breakthrough. In Case Goal or Shot. (see codes section)

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
EA_HB /HB_SCR_H EA_HB /HB_SCR_A	Home/Away team score of the game after the action or score only for Penalty Shootout period. Only sent if a goal has been scored for the action.	2 min after the results of the match are approved.
EA_HB /HB_LEAD_H	Difference between the numbers of goals for the Home Team	When was available
EA_HB /HB_LEAD_A	Difference between the numbers of goals for the Away Team	When was available
EA_HB /HB_WIN	Indicator of the current lead Point by Team.	When was available
EA_HB /HB_DEST_TYPE	Shot destination: Top Left, Top Right ..., and Bottom Left. In case of goal or shots saved	2 min after the results of the match are approved.
EA_HB /HB_SHOT_TYPE	Description for not successful shots: Missed, Post, blocked, Saved. Just in case Shot	2 min after the results of the match are approved.
EA_HB /HB_SHOT_POS	Position, from where the shot did: Left 6m ... In Case Goal or Shot.	2 min after the results of the match are approved.



The following table describes in more detail the Result /Competitor /Stats /Stat element and its child element ExtendedStat in the case of Handball.

Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HB	HB_SHT		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total Shots/penalties on goals in the event unit.
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goals.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
	HB_SD HB_W HB_LD HB_PS HB_FB HB_BT HB_TOT		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs in the event unit. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goal.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value:



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Total Saves.
		HB_M		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Missed.
		HB_P		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Post.
		HB_B		S(3)	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Blocked. If doesn't apply send "n/a"
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage (%).
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR		CC @PeriodNo	N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots in the event unit.
	HB_ASS HB_TO HB_ST HB_BLC HB_CAU HB_EXP HB_EXC HB_TO_TEAM		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit.



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Total turnovers bench/team in the event unit.
	HB_CAU_COA HB_EXP_COA HB_EXC_COA		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Yellow cards/Red cards/Exclusions for the Coach in the event unit.
	HB_TMS_COA			N(2) 90 Or N(2)+ 90+	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: 2 Minute Suspensions for the Coach in the event unit. Send + for "2 minutes + 2 minutes suspensions".
	HB_TMS		CC @PeriodNo	N(2) 90 Or N(2)+ 90+	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: 2 Minute Suspensions in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_ATC		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total Attacks for the team in the event unit.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Scoring Efficiency.
	HB_SHT_GK HB_SD_GK HB_W_GK HB_LD_GK HB_PS_GK HB_FB_GK		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
	HB_BT_GK (Only Goalkeepers) for				For @Value: Total shots / 6 metres / wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the Goalkeepers in the event unit.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total saves.
	HB_EA			N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Efficiency (%).
	HB_TL_GK HB_ML_GK HB_BL_GK HB_TC_GK HB_MC_GK HB_BC_GK HB_TR_GK HB_MR_GK HB_BR_GK (Only Goalkeepers) for		CC @PeriodNo	N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number (only for Teams statistics)
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT ST_HB /HB_SHT /HB_G ST_HB /HB_SHT /HB_EA	Total Shots, shots on goals made and the efficiency in the event unit.	Always, if the information is available team
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT ST_HB /HB_TOT	Total 6 metres shots / Wing shots /9 metres shots /7 metres shots / Fast Breaks / Breakthroughs in the event unit. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).	Always, if the information is available
/HB_G /HB_S /HB_M /HB_P /HB_B /HB_EA	Total Goals, Saves, Missed, Post, Blocked and efficiency in 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the team in the event unit.	Always, if the information is available
ST_HB /HB_TL ST_HB /HB_ML	Top/Middle/Bottom Left, Top/Middle/Bottom centre,	Always, if the information is available



Type /Code /ExtendedStat Code	Description	Expected	
ST_HB /HB_BL ST_HB /HB_TC ST_HB /HB_MC ST_HB /HB_BC ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR	Top/Middle/Bottom right: Total Goals/Shots in the event unit.		
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_ST ST_HB /HB_BLC ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC ST_HB /HB_TO_TEAM	Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit. Total turnovers bench/team in the event unit.	Always, if the information is available	
ST_HB /HB_CAU_COA ST_HB /HB_EXP_COA ST_HB / HB_EXC_COA ST_HB / HB_TMS_COA	Yellow cards / Red cards / Exclusions / 2 Minute Suspensions for the Coach in the event unit.	Always, if the information is available	
ST_HB /HB_TMS	2 Minutes Suspensions in the event unit.	Always, if the information is available	
ST_HB /HB_ATC /HB_EA	Total Attacks and the scoring efficiency in the event unit.	Always, if the information is available	
ST_HB /HB_SHT_GK ST_HB /HB_SD_GK ST_HB /HB_W_GK ST_HB /HB_LD_GK ST_HB /HB_PS_GK ST_HB /HB_FB_GK ST_HB /HB_BT_GK	Total shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers in the event unit.	Always, if the information is available	
	/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs (for goalkeepers).	Always, if the information is available
ST_HB /HB_TL_GK ST_HB /HB_ML_GK ST_HB /HB_BL_GK ST_HB /HB_TC_GK ST_HB /HB_MC_GK ST_HB /HB_BC_GK ST_HB /HB_TR_GK ST_HB /HB_MR_GK ST_HB /HB_BR_GK	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.	Always, if the information is available	

The following table describes in more detail the Result /Competitor /Composition /Athlete /Stats /Stat and its child element ExtendedStat in the case of Handball.

Element: Result /Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HB	HB_SHT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Shots/penalties on goals in the event unit.



Element: Result /Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goals.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage Efficiency (%).
	HB_SD HB_W HB_LD HB_PS HB_FB HB_BT HB_TOT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs in the event unit. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goal.
		HB_M		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Missed.
		HB_P		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Post.
		HB_B		S(3)	For @Type: Send proposed code (as type)



Element: Result /Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Blocked. If doesn't apply send "n/a"
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR			N(2)/N(2) 90/90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots in the event unit.
	HB_ASS HB_TO HB_ST HB_BLC HB_CAU HB_EXP HB_EXC			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit.
	HB_TMS			N(2) 90 Or N(2)+ 90+	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: 2 Minute Suspensions in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_PTIME			HH:MM:SS 99:99:90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send the period number (only for Individuals statistics) For @Value: Time played for the athlete in the game.
	HB_SHT_GK HB_SD_GK HB_W_GK HB_LD_GK HB_PS_GK HB_FB_GK HB_BT_GK			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Total shots / 6 metres / wing / 9



Element: Result /Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
	(Only Goalkeepers) for				metres / 7 metres / Fast Breaks / Breakthroughs shots for the Goalkeepers in the event unit.
		HB_S		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Total saves.
		HB_EA		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Efficiency (%).
		HB_TL_GK HB_ML_GK HB_BL_GK HB_TC_GK HB_MC_GK HB_BC_GK HB_TR_GK HB_MR_GK HB_BR_GK		N(2)/N(2) 90/90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.
	(Only Goalkeepers) for				

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT ST_HB /HB_SHT /HB_G ST_HB /HB_SHT /HB_EA	Total Shots, shots on goals made and the efficiency in the event unit.	Always, if the information is available team
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT ST_HB /HB_TOT	Total 6 metres shots / Wing shots / 9 metres shots / 7 metres shots / Fast Breaks / Breakthroughs in the event unit. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).	Always, if the information is available
/HB_G /HB_M /HB_P /HB_B	Total Goals in 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs in the event unit. Total misses, posts and blocks in the event unit (only for HB_TOT).	Always, if the information is available
ST_HB /HB_TL ST_HB /HB_ML ST_HB /HB_BL ST_HB /HB_TC ST_HB /HB_MC ST_HB /HB_BC	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots in the event unit.	Always, if the information is available



Type /Code /ExtendedStat Code		Description	Expected
ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR			
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_ST ST_HB /HB_BLC ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC		Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit.	Always, if the information is available
ST_HB /HB_TMS		2 Minutes Suspensions in the event unit.	Always, if the information is available
ST_HB / HB_PTIME		Time played for the athlete in the game.	Always, if the information is available
ST_HB /HB_SHT_GK ST_HB /HB_SD_GK ST_HB /HB_W_GK ST_HB /HB_LD_GK ST_HB /HB_PS_GK ST_HB /HB_FB_GK ST_HB /HB_BT_GK		Total shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers in the event unit.	Always, if the information is available
	/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs (for goalkeepers).	Always, if the information is available
ST_HB /HB_TL_GK ST_HB /HB_ML_GK ST_HB /HB_BL_GK ST_HB /HB_TC_GK ST_HB /HB_MC_GK ST_HB /HB_BC_GK ST_HB /HB_TR_GK ST_HB /HB_MR_GK ST_HB /HB_BR_GK		Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.	Always, if the information is available

The following table describes in more detail the Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult element in the case of Handball.

Element: Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult			
Type	Code	Value	Description
ER_HB	HB_IRM	S(3)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Athlete's status in the team. When the athlete has been disqualified.
	HB_POSITION	CC @Position	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Position player in the team. Only for GK

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
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ER_HB /HB_IRM	To know if the athlete was disqualified	As soon as it is known
ER_HB /HB_POSITION	Position in the team. Only for GK	As soon as it is known

5.1.4.6 Message sort

Please, follow the general definition.



5.1.5 Pool standings of group in a team competition

5.1.5.1 Description

This message is the Pool standings of group in a team competition message as described in the ODF Sport Messages Interface Document.

In the case of Handball, the message has to be sent for all the competition events, as listed in the header values section.

5.1.5.2 Header Values

The DocumentCode ([DD][G][EEE]900) attribute in the ODF header will be sent according for all the competition events to the ODF Common Codes document (header values sheet).

The DocumentSubtype attribute will be:

- Group A: A
- Group B: B

5.1.5.3 Trigger and Frequency

Please, follow the general definition.

- Interim:
 - After each game of the preliminaries is official of the relevant group
- Official
 - After last game of the preliminaries

5.1.5.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- Result /Competitor /ExtendedResults /ExtendedResult
- Result /Competitor /ExtendedResults /ExtendedResult /Extensions

5.1.5.5 Message Values

The following table lists the Pool standings of group in a team competition optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Result	Rank	O	String	Rank at the group. The rank is calculated firstly by classification points or disqualification, secondly by goal difference and goals for. It is optional because the team can be disqualified.
	RankEqual	O	Y	Send 'Y' if the Rank is equalled.
	ResultType	M	CC @ResultType	Result type, either points or IRM with points obtained by the competitor at all the games of the group.
	IRM	O	CC @IRM	IRM for the particular group Send just in the case @ResultType is IRM (see codes section)



Element	Attribute	M/O	Value	Comments
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the results for the group, if they were to be presented. initial by 1 - Draw number, later when competition starts by 1 - Rank

The following table describes in more detail the Result /Competitor /ExtendedResults /ExtendedResult element and its child element Extensions.

Element: Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
ER_HB	HB_OPPONENT		N(1)	CC @Organisation	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Order between the opponents
					For @Value: Send the NOC of the opponent competitor
		HB_RES		N(2)-N(2) 90-90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Match result.
		HB_COMP_DATE		dd MMM Ex. 11 Aug	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Match date
		HB_STATUS		CC @GameStatus	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Cancelled. If the team disqualified during preliminary round.
	HB_GAMES				For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Do not send anything
		HB_PLAYED		N(2)	For @Type:



Element: Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
				90	Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Number of matches played
		HB_WON		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Number of matches won
		HB_TIED		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Number of matches tied
		HB_LOST		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Number of matches lost
		HB_CP		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Classification points for the team
	HB_RES				For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Do not send anything
		HB_WON		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Goals for



Element: Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
		HB_LOST		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Goals against
		HB_DIFF		N(2) 90 Or -N(2) -90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Goals difference, between goals for and goals against

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
ER_HB /HB_OPPONENT /HB_RES /HB_COMP_DATE	Competitor opponent at the group. The score obtained by the team when played with this opponent, date of the match.	Always
ER_HB /HB_OPPONENT /HB_STATUS	To know if the game was cancelled. If the team was disqualified during or after the preliminary round but before any matches have been played by any teams in the classification then all the preliminary round matches of the disqualified team will be cancelled	As soon as it is known.
ER_HB /HB_GAMES /HB_PLAYED /HB_WON /HB_TIED /HB_LOST	The total matches played, played won, played tied and played lost by the team in that group.	Always
ER_HB /HB_GAMES /HB_CP	The points obtained by the team for all the games played in that group.	Always
ER_HB /HB_RES /HB_WON	The total goals for the team in that group.	Always
ER_HB /HB_RES /HB_LOST	The total goals against for the team in that group.	Always
ER_HB /HB_RES /HB_DIFF	The total goals difference (goals for and goals against) for the team in that group.	Always

5.1.5.6 Message sort

Please, follow the general definition.



5.1.6 Event Final Ranking

5.1.6.1 Description

This message is the Event Final Ranking message as described in the ODF Sport Messages Interface Document.

In the case of Handball, the message has to be sent for all the competition events, as listed in the header values section.

5.1.6.2 Header Values

The DocumentCode attribute in the ODF header will be sent according for all the competition events to the ODF Common Codes document (header values sheet).

5.1.6.3 Trigger and Frequency

- After each event

5.1.6.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- Result /Competitor /ExtendedResults /ExtendedResult
- Result /Competitor /ExtendedResults /ExtendedResult /Extensions

5.1.6.5 Message Values

The following table lists the Event Final Ranking optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Result	Rank	O	String	Rank of the competitor in the result. It is optional because the team can be disqualified from the game.
	RankEqual	O	Y	Send 'Y' if the Rank is equalled.
	IRM	O	CC @IRM	Send just if the team has been disqualified.
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the competitors at the end of the event, if they were to be presented. It is based on the rank.

The following table describes in more detail the Result /Competitor /ExtendedResults /ExtendedResult element and its child element Extensions.

Element: Result /Competitor /ExtendedResults /ExtendedResult				
Type	Code	Extension Code	Value	Description
ER_HB	HB_GAMES	HB_PLAYED	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Matches played
		HB_WON	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Number of matches won



Element: Result /Competitor /ExtendedResults /ExtendedResult				
Type	Code	Extension Code	Value	Description
		HB_LOST	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Number of matches lost
		HB_TIED	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Number of matches tied

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
ER_HB /HB_GAMES /HB_PLAYED /HB_WON /HB_LOST /HB_TIED	The total matches played, played won, played lost and play tied by the team.	Always

5.1.6.6 Message sort

Please, follow the general definition.



5.1.7 Statistics

5.1.7.1 Description

This message is the Statistics message as described in the ODF Sport Messages Interface Document.

5.1.7.2 Header Values

The DocumentCode attribute in the ODF header will be sent according for all the competition events to the ODF Common Codes document (header values sheet).

Moreover, header attribute DocumentSubtype will be informed, categorizing different types of statistics reports. We will have the following different DocumentSubtype header attributes:

- **CUM:** For cumulative data of individual player statistics and team statistics. There will be one single message for each team. The DocumentSubcode is the NOC concatenated with the Team Number, e.g. BRA1. Concatenation will happen only when an NOC has more than one team.
- **TEAM_RANKING:** Ranking of team tournament statistics.
- **IND_RANKING:** Ranking of individual tournament statistics, for the best athletes.
- **TOU:** Tournament statistics.

Use DocumentSubcode whit the Organisation only for DocumentSubtype CUM.

5.1.7.3 Trigger and Frequency

This message should be sent after the end of each match when it is official with the DocumentCode DDGEEE000.

- After each match

Note: First send the CUM messages and after send the TEAM_RANKING and IND_RANKING messages.

5.1.7.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- Stats /StatsItems /StatItem
- Stats /StatsItems /StatsItem /ExtendedStat
- Stats /Competitor /StatsItems /StatsItem
- Stats /Competitor /StatsItems /StatsItem /ExtendedStat
- Stats /Competitor /Composition /Athlete /StatsItems /StatsItem
- Stats /Competitor /Composition /Athlete /StatsItems /StatsItem /ExtendedStat

5.1.7.5 Message Values

The following table lists the Statistics table optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.



Element	Attribute	M/O	Value	Comments
Stats	Code	M	CC @Statistics	A code to identify the statistics being listed.
Stats /Competitor	Order	M	N(3)	Sort order for TEAM_RANKING: For each team: 1 – Rank, 2 -Team NOC code If teams share equal rank, present teams in alphabetical order by team NOC code Always show rank for each team
Stats /Competitor /Composition /Athlete	Order	M	N(3)	Sort order for CUM: Uniform number or disqualification, family name , given name Sort order for IND_RANKING: 1 – Rank, 2 –family name, 3 – given name

The following table describes in more detail the Stats /StatsItems /StatsItem element and its child element ExtendedStat, this information is for the Tournament Statistics.

Element: Stats /StatsItems /StatItem				
Type	Code	ExtendedStat Code	Value	Description
ST_HB	HB_SHT HB_SD HB_W HB_LD HB_PS HB_FB HB_BT		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total Shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for team.
		HB_G	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total goals.
		HB_EA	N(3) 990	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Shooting percentage Efficiency (%).
	HB_ASS HB_TO HB_ST HB_BLC HB_CAU HB_EXP HB_EXC		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total assists, turnovers / steals / blocked / yellow cards / red cards / Exclusions for the team.
	HB_TMS		N(2) 90	For @Type: Send proposed type
			Or	For @Code: Send proposed code
			N(2)+ 90+	For @Value: 2 Minute Suspensions for the team. Send + for "2 minutes + 2 minutes suspensions"



Element: Stats /StatsItems /StatItem				
Type	Code	ExtendedStat Code	Value	Description
ST_HB_GK (Only for Goalkeepers)	HB_SHT HB_SD HB_W HB_LD HB_PS HB_FB HB_BT		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total shots / 6 metres / wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers.
		HB_S	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total saves.
		HB_EA	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Efficiency (%).

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT	Total Shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the team.	Always, if the information is available for the DocumentSubtype=TOU
/HB_G /HB_EA	Total Goals and efficiency in shots on goal / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the team.	Always, if the information is available for the DocumentSubtype=TOU
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_ST ST_HB /HB_BLC ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC	Total assists / turnovers / steals / blocked / yellow cards / red cards / Exclusions for the team.	Always, if the information is available for the DocumentSubtype=TOU
ST_HB /HB_TMS	2 Minute Suspensions for the team in the event unit. Send + for "2 minutes + 2 minutes suspensions"	Always, if the information is available for the DocumentSubtype=TOU
ST_HB_GK /HB_SHT ST_HB_GK /HB_SD ST_HB_GK /HB_W ST_HB_GK /HB_LD ST_HB_GK /HB_PS ST_HB_GK /HB_FB ST_HB_GK /HB_BT	Total shots /6 metres/ Wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs for the Goalkeepers.	Always, if the information is available for the DocumentSubtype=TOU
/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs.	Always, if the information is available for the DocumentSubtype= TOU



The following table describes in more detail the Stats /Competitor /StatsItems /StatsItem element and its child element ExtendedStat.

Element: Stats /Competitor /StatsItems /StatsItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HB	HB_SHT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Shots for team.
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goals.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage Efficiency (%).
	HB_SD HB_W HB_LD HB_PS HB_FB HB_BT HB_TOT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the team. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goal.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything



Element: Stats /Competitor /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Total Saves.
		HB_M		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Missed.
		HB_P		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Post.
		HB_B		S(3)	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Blocked. If doesn't apply send "n/a"
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage (%).
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR			N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the teams.
	HB_ASS HB_ST HB_BLC			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total assists/ steals/ blocked for the team.
	HB_TO			N(2)	For @Type:



Element: Stats /Competitor /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
	HB_CAU HB_EXP HB_EXC HB_TO_TEAM			90	Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total turnovers/ yellow cards/ red cards/ Exclusions for the team.
					Total turnovers bench/team.
	HB_COA				For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Do not send anything
		HB_CAU HB_EXP HB_EXC		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Yellow cards / Red cards / Exclusions for the bench/team.
		HB_TMS		N(2) 90 Or N(2)+ 90+	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
		HB_TMS		N(2) 90 Or N(2)+ 90+	For @Value: 2 Minute Suspensions for the Coach. Send + for "2 minutes + 2 minutes suspensions"
	HB_MP			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total match played for team.



Element: Stats /Competitor /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
	HB_PTY_PTS			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total penalty points for team.
		HB_AVR		N(2).N(1) 90.0	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total penalty points and average for the team.
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Team's rank on penalty points.
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
ST_HB	HB_RSD_GRA HB_CSD_GRA HB_LSD_GRA HB_RW_GRA HB_LW_GRA HB_RLD_GRA HB_CLD_GRA HB_LLD_GRA HB_PS_GRA HB_FB_GRA HB_BT_GRA		N(1) 0	N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send @Pos=1 for Offence Graphic (shots) and @Pos=2 for Defence Graphic (saves).
					For @Value: Right/Centre/Left 6 metres, Right/Left Wing, Right/Centre/Left 9 metres, 7 metres, Fast Breaks, Breakthroughs Goals/shots or goals/saves for the team.
ST_HB_GK (Only for Goalkeepers)	HB_SHT HB_SD HB_W HB_LD HB_PS HB_FB HB_BT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value:



Element: Stats /Competitor /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Total shots / 6 metres / wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the Goalkeepers.
		HB_S		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Total saves.
		HB_EA		N(2) 90	For @Type: Send proposed code (as type) For @Code: Send proposed extension code For @Pos: Do not send anything For @Value: Efficiency (%).
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR			N(2)/N(2) 90/90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers.

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT /HB_G /HB_EA	Total Shots, shots on goals made and the efficiency for team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT ST_HB /HB_TOT	Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the team. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).	Always, if the information is available for the DocumentSubtype=CUM
/HB_G /HB_S /HB_M /HB_P /HB_B /HB_EA	Total Goals, Saves, Missed, Post, Blocked and efficiency in 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_TL ST_HB /HB_ML ST_HB /HB_BL ST_HB /HB_TC	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the team.	Always, if the information is available for the DocumentSubtype=CUM



Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_MC ST_HB /HB_BC ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR		
ST_HB /HB_ASS ST_HB /HB_ST ST_HB /HB_BLC	Total assists / steals / blocked for the team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_TO ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC ST_HB /HB_TO_TEAM	Total turnovers / yellow cards / red cards / Exclusions for the team. Total turnovers bench/team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_COA /HB_CAU /HB_EXP /HB_EXC /HB_TMS	Yellow cards / Red cards / Exclusions / 2 Minutes Suspensions for the Coach.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_TMS	2 Minute Suspensions for the team. Send + for "2 minutes + 2 minutes suspensions"	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_MP	Total match played for the team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_PTY_PTS /HB_AVR	Total penalty points and average for the team.	Always, if the information is available for the DocumentSubtype= TEAM_RANKING
ST_HB /HB_PTY_PTS /HB_RANK	Team's rank on penalty points.	Always, if the information is available for the DocumentSubtype=TEAM_RANKING
ST_HB /HB_RSD_GRA ST_HB /HB_CSD_GRA ST_HB /HB_LSD_GRA ST_HB /HB_RW_GRA ST_HB /HB_LW_GRA ST_HB /HB_RLD_GRA ST_HB /HB_CLD_GRA ST_HB /HB_LLD_GRA ST_HB /HB_PS_GRA ST_HB /HB_FB_GRA ST_HB /HB_BT_GRA	Right/Centre/Left 6 metres, Right/Left Wing, Right/Centre/Left 9 metres, 7 metres, Fast Breaks, Breakthroughs Goals/shots or goals/save according with the @pos shots/saves for the team.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB_GK /HB_SHT ST_HB_GK /HB_SD ST_HB_GK /HB_W ST_HB_GK /HB_LD ST_HB_GK /HB_PS ST_HB_GK /HB_FB ST_HB_GK /HB_BT	Total shots /6 metres/ Wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs for the Goalkeepers.	Always, if the information is available for the DocumentSubtype=CUM
/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB_GK /HB_TL ST_HB_GK /HB_ML ST_HB_GK /HB_BL ST_HB_GK /HB_TC ST_HB_GK /HB_MC ST_HB_GK /HB_BC ST_HB_GK /HB_TR ST_HB_GK /HB_MR ST_HB_GK /HB_BR	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers.	Always, if the information is available for the DocumentSubtype=CUM



The following table describes in more detail the Stats /Competitor /Composition /Athlete /StatsItems /StatsItem element and its child element ExtendedStat.

Element: Stats /Competitor /Composition /Athlete /StatsItems /StatsItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HB	HB_SHT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Shots for athlete in the event unit.
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Value: Total goals.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage Efficiency (%).
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Athlete's rank on goals for goal scores. Send for HB_SHT
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
	HB_NOTE		N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Note for goal scores, only if tied players can not fit on the list.
	HB_SD HB_W HB_LD			N(2) 90	For @Type: Send proposed type For @Code:



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
	HB_PS HB_FB HB_BT				Send proposed code
					For @Pos: Do not send anything
					For @Value: Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the athlete in the event unit.
	HB_G			N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goal.
	HB_TOT				For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Do not send anything
		HB_M		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total misses.
		HB_P		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total post.
		HB_B		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total blocked.
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR			N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Top/Middle/Bottom Left,



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
	HB_BR				Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the athlete in the event unit.
	HB_ASS HB_TO HB_CAU HB_EXP HB_EXC			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total assists / turnovers / yellow cards / red cards / Exclusions for the athlete in the event unit.
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Athlete's rank on assists. Send for HB_ASS
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
		HB_NOTE	N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Send for HB_ASS, only if tied players can not fit on the list.
	HB_ST HB_BLC			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total steals / blocked for the athlete in the event unit.
		HB_AVR		N(2).N(1) 90.0	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Average.
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Athlete's rank on steals/total blocked.
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
		HB_NOTE	N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Only if tied players can not fit on the list.
	HB_TMS			N(2) 90	For @Type: Send proposed type
				Or	For @Code: Send proposed code
				N(2)+ 90+	For @Pos: Do not send anything
					For @Value: 2 Minute Suspensions for the athlete in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_PTIME			HH:MM:SS 99:99:90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Time played for the athlete in all games where the athlete was participated.
	HB_MP			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total match played for athlete.
	HB_AVR			N(2).N(1)	For @Type:



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
				90.0	Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Average.
	HB_G_AS			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total goals shots + Assists.
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Athlete's rank on goals + assists.
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
		HB_NOTE	N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Only if tied players can not fit on the list.
	HB_PTY_PTS			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total penalty points for the athlete.
		HB_AVR		N(2).N(1) 90.0	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value:



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Average.
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Athlete's rank on average penalty points.
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
		HB_NOTE	N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Only if tied players can not fit on the list.
ST_HB_GK (Only for Goalkeepers)	HB_SHT HB_SD HB_W HB_LD HB_PS HB_FB HB_BT			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total shots / 6 metres / wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers in the event unit.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total saves.
		HB_EA		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Efficiency (%).
		HB_RANK		String	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code



Element: Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Pos: Do not send anything
					For @Value: Goalkeeper's rank on efficiency of saves for total shots/penalty saves. Send for HB_SHT, HB_PTY
		HB_ERANK		Y	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Y in the case of equalled rank
		HB_NOTE	N(2) 90	N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Number of players
					For @Value: Send for HB_SHT and HB_PTY, only if tied players can not fit on the list.
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR			N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT /HB_G /HB_EA	Total Shots, shots on goals made and the efficiency for athlete in the event unit	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_SHT /HB_RANK /HB_ERANK	Athlete's rank on goals for goal scores. Send Y in the case of equalled rank.	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HB /HB_SHT /HB_NOTE	Note for goal scores, only if tied players can not fit on the list.	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT	Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype=CUM
/HB_G	Total Goals in 6 metres / Wing /9 metres / 7	Always, if the information is available for



Type /Code /ExtendedStat Code	Description	Expected
	metres / Fast Breaks / Breakthroughs shots for the athlete in the event unit.	the DocumentSubtype=CUM
ST_HB /HB_TOT /HB_M /HB_P /HB_B	Total Missed, Post and Blocked in shots for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_TL ST_HB /HB_ML ST_HB /HB_BL ST_HB /HB_TC ST_HB /HB_MC ST_HB /HB_BC ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC	Total assists/ turnovers / yellow cards/ red cards/ Exclusions for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_ASS /HB_RANK /HB_ERANK	Athlete's rank on assists. Send Y in the case of equalled rank.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_ASS /HB_NOTE	Note for assists, only if tied players can not fit on the list.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_ST ST_HB /HB_BLC	Total steals/ blocked for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype= CUM
ST_HB /HB_ST /HB_AVR ST_HB /HB_BLC /HB_AVR	Total steals/ blocked average for the athlete in the event unit.	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HB /HB_ST /HB_RANK /HB_ERANK ST_HB /HB_BLC /HB_RANK /HB_ERANK	Athlete's rank on steals/total blocked. Send Y in the case of equalled rank.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_ST /HB_NOTE ST_HB /HB_BLC /HB_NOTE	Note for steals/blocked, only if tied players can not fit on the list.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_TMS	2 Minute Suspensions for the athlete in the event unit. Send + for "2 minutes + 2 minutes suspensions"	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_PTIME	Time played for the athlete in all the games where the athlete was participated.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_MP	Total match played for the athlete.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB /HB_AVR	Athlete's average per match.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_G_AS	Total shots goals + assists for the athlete.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_G_AS /HB_RANK	Athlete's rank on goals + assists.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_G_AS /HB_NOTE	Note for goals + assists, only if tied players can not fit on the list.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_PTY_PTS /HB_AVR	Total penalty points and average for the athlete.	Always, if the information is available for the DocumentSubtype= IND_RANKING



Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_PTY_PTS /HB_RANK	Athlete's rank on average penalty points.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB /HB_PTY_PTS / HB_NOTE	Note for penalty points, only if tied players can not fit on the list.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB_GK /HB_SHT ST_HB_GK /HB_SD ST_HB_GK /HB_W ST_HB_GK /HB_LD ST_HB_GK /HB_PS ST_HB_GK /HB_FB ST_HB_GK /HB_BT	Total shots /6 metres/ Wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs for the Goalkeepers in the event unit.	Always, if the information is available for the DocumentSubtype=CUM
/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs.	Always, if the information is available for the DocumentSubtype=CUM
ST_HB_GK /HB_SHT /HB_RANK /HB_ERANK ST_HB_GK /HB_PTY /HB_RANK /HB_ERANK	Goalkeeper's rank on efficiency of saves for total shots/penalty saves. Send Y in the case of equalled rank.	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB_GK /HB_SHT /HB_NOTE ST_HB_GK /HB_PTY /HB_NOTE	Note for shot/penalty, only if tied players can not fit on the list. This note is for statistics' goalkeeper	Always, if the information is available for the DocumentSubtype=IND_RANKING
ST_HB_GK /HB_TL ST_HB_GK /HB_ML ST_HB_GK /HB_BL ST_HB_GK /HB_TC ST_HB_GK /HB_MC ST_HB_GK /HB_BC ST_HB_GK /HB_TR ST_HB_GK /HB_MR ST_HB_GK /HB_BR	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.	Always, if the information is available for the DocumentSubtype=CUM

5.1.7.6 Message sort

Please, follow the general definition.



5.1.8 Brackets

5.1.8.1 Description

This message is the Brackets message as described in the ODF Sport Messages Interface Document.

In the case of Handball, the message has to be sent for all the competition events after the preliminaries phases, as listed in the header values section.

5.1.8.2 Header Values

The DocumentCode attribute in the ODF header will be sent according for all the competition events to the ODF Common Codes document (header values sheet).

5.1.8.3 Trigger and Frequency

Please, follow the general definition, taking also into account the following:

- Before the competition
- After the last match of preliminaries is officialised
- After every match during final phases

5.1.8.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- Bracket /BracketItems /BracketItem /CompetitorPlace /ExtCompPlaces /ExtCompPlace (it should be included when the competitor is not yet known)
- Bracket /BracketItems /BracketItem /CompetitorPlace /Competitor and its child element (it should be included only when the competitor is known)
- Moreover, the following should be considered:
 - Bracket /BracketItems /BracketItem /NextUnit should be informed in the case of Quarterfinals and Semi-finals.
 - Bracket /BracketItems /BracketItem /NexUnitLoser should be informed just in the case of Quarterfinals and Semi-finals.
 - Bracket /BracketItems /BracketItem /CompetitorPlace /PreviousUnit should be informed in the case of the Final (Gold Medal Match and the Bronze Medal Match) and Semi-finals.

5.1.8.5 Message Values

The following table lists the Brackets optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Bracket	Code	M	CC @Bracket	Bracket code to identify a bracket item. It should be always a bracket of finals.
Bracket /BracketItems	Code	M	CC @BracketItems	Bracket code to identify a set of bracket items. (see codes section) It is referred to the phase of event. It will be sent quarterfinals, semi-finals or final phase (e.g.: QFL <i>Quarterfinals</i> ...)



Element	Attribute	M/O	Value	Comments
Bracket /BracketItems /BracketItem	Code	M	N(2) 90	Bracket code to identify a bracket item. It is referred to the related unit of phase. It will be sent the Match number for each bracket item (e.g.: 31, 32 ..., and 42).
Bracket /BracketItems /BracketItem /CompetitorPlace	Code	O	CC @CompetitorPlace	It will be sent when the competitor is not known yet (UNK) for this bracket item.

The following table describes in more detail the Bracket /BracketItems /BracketItem /CompetitorPlace /ExtCompPlaces /ExtCompPlace element.

Element: Bracket /BracketItems /BracketItem /CompetitorPlace /ExtCompPlaces /ExtCompPlace				
Type	Code	Pos	Value	Description
ECP_HB	HB_COMP_INF	CC @Desc	N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send if the competitor is the group, winner or the loser. (see codes section)
				For @Value: Send the match number or rank in the group.

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
ECP_HB /HB_COMP_INF	The competitor is the winner or the loser of the specified game number. Example: @pos=10 @Value=1 -> "A1" @pos=11 @Value=2 -> "B2" @pos=1 @Value=25 -> "Winner 37"	Just when the competitor is not known yet (when the CompetitorPlace @Code is UNK)

5.1.8.6 Message sort

Please, follow the general definition.



5.1.9 Event's Medallists

5.1.9.1 Description

This message is the Event's Medallists message as described in the ODF Sport Messages Interface Document.

In the case of Handball, the message has to be sent for all the competition events, as listed in the header values section.

5.1.9.2 Header Values

The DocumentCode attribute in the ODF header will be sent according for all the competition events to the ODF Common Codes document (header values sheet).

5.1.9.3 Trigger and Frequency

Please, follow the general definition.

5.1.9.4 Message Structure

Please, follow the general definition.

5.1.9.5 Message Values

Please, follow the general definition.

5.1.9.6 Message sort

Please, follow the general definition.



5.1.10 Discipline/venue good morning

5.1.10.1 Description

This message is the Discipline/venue good morning message as described in the ODF Sport Messages Interface Document.

5.1.10.2 Header Values

The DocumentCode attribute in the ODF header will be sent according to the discipline/venue pairs as described in the ODF Common Codes document.

5.1.10.3 Trigger and Frequency

Please, follow the general definition.

5.1.10.4 Message Structure

Please, follow the general definition.

5.1.10.5 Message Values

Please, follow the general definition.

5.1.10.6 Message sort

Please, follow the general definition.



5.1.11 Discipline/venue good night

5.1.11.1 Description

This message is the Discipline/venue good night message as described in the ODF Sport Messages Interface Document.

5.1.11.2 Header Values

The DocumentCode attribute in the ODF header will be sent according to the discipline/venue pairs as described in the ODF Common Codes document.

5.1.11.3 Trigger and Frequency

Please, follow the general definition.

5.1.11.4 Message Structure

Please, follow the general definition.

5.1.11.5 Message Values

Please, follow the general definition.

5.1.11.6 Message sort

Please, follow the general definition.



5.1.12 Discipline configuration

5.1.12.1 Description

This message is the Discipline configuration message as described in the ODF Sport Messages Interface Document.

5.1.12.2 Header Values

Please, follow the general definition.

5.1.12.3 Trigger and Frequency

Please, follow the general definition.

5.1.12.4 Message Structure

Please, follow the general definition.

5.1.12.5 Message Values

Send the attributes and codes according to the tables described in this section.

The following table lists the Discipline configuration optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Handball, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Configs /Config	Gender	M	CC @Gender	Gender code of the RSC (M/W).
	Event	M	CC @Event	Event code of the RSC. There is the following event for: (400)
	Phase	M	CC @Phase	Phase code of the RSC. There are the following phases for: (A) Preliminary Group A (B) Preliminary Group B (3) Quarterfinals (2) Semi-finals (1) Finals
	Unit	M	CC @Unit	It should be informed just in the case that the information is by Event Unit.

The following table describes in more detail the Configs /Config /ExtendedConfig element.

Element: Configs /Config /ExtendedConfig			
Type	Code	Value	Description
EC_HB	HB_MATCH_NUMBER (Send by event unit)	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Pos: Do not send anything
			For @Value: Match number.



For the table above, we have the following additional/summary information

Type /Code	Description	Expected
EC_HB /HB_MATCH_NUMBER	The match number.	Always (after this information was approval)

5.1.12.6 Message sort

Please, follow the general definition.



6 Real time

The following chapter describes the ODF-RT part of Handball.

6.1 Real Time Applicable Messages

The next table is a full list of all ODF-RT messages and describes the list of messages used in Handball the same way as it is done in the table of chapter 4.

Message Type	Message name	Message documented	Message used in this sport	Message extended in this document
DT_RT_GM	RT Discipline/Venue good morning	Sports	X	
DT_RT_GN	RT Discipline/venue good night	Sports	X	
DT_RT_KA	RT Discipline/venue keep alive	Sports	X	
DT_RT_RESULT	RT Event Unit Results	Sports	X	X
DT_RT_CUMULATIVE_RESULT	RT Cumulative Results	Sports		
DT_RT_CLOCK	RT Clock	Sports	X	X



6.1.1 RT Event Unit Results

6.1.1.1 Description

This message is the RT Event Unit Results message as described in the ODF Sport Messages Interface Document.

6.1.1.2 Header Values

The ODF header will be sent according to the ODF Common Codes document.

6.1.1.3 Trigger and Frequency

The following is the trigger for this message in ODF-RT:

- ResultStatus="LIVE_UPDATE"
 - T1: Trigger at the beginning of one period
 - T2: Trigger after one new or modified action
 - T3: Trigger after one change in the scores
 - T4: Trigger after a goalkeeper substitution
 - T5: Trigger at the end of one period
 - T6: Trigger when a team is disqualified
 - T7: Trigger at the end of one match
 - T8: Trigger after one change in the UnitInfo (attendance)
- ResultStatus="LIVE_FULL"
 - This value should be suggested after further testing and sent in the DT_RT_GM message after further testing
- For other ResultStatus, follow the general definition.

6.1.1.4 Message Structure

The optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Handball are:

- UnitInfos /UnitDateTime (following the general rules for this element)
- UnitInfos /UnitInfo
- Periods /Period
- UnitActions /UnitAction
- UnitActions /UnitAction /ExtendedAction
- UnitActions /UnitAction /Competitor(following the general rules for this element)
- UnitActions /UnitAction /Competitor /Composition /Athlete (following the general rules for this element)
- Result /Competitor /Stats /Stat
- Result /Competitor /Stats /Stat /ExtendedStat



- Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult
- Result /Competitor /Composition /Athlete /Stats /Stat
- Result /Competitor /Composition /Athlete /Stats /Stat /ExtendedStat

Please, follow the general considerations for all ResultStatus, taking into account that: Result information for one skier is known in the finish line (time and rank).

In the next section (message values), there is a more detailed definition.

6.1.1.5 Message Values

The following table describes in more detail the Result element.

Element	Attribute	M/O	Value	Comments	LIVE_UPDATE RT trigger expected
Periods /Period	Code	M	CC @Period	Times, usually there are 2 half times.	T3
	HomeScore	M	N(2) 90	Overall score of the home competitor at the end of the period.	T3
	AwayScore	M	N(2) 90	Overall score of the away competitor at the end of the period	T3
	HomePeriodScore	M	N(2) 90	Score of the home competitor just for that period.	T3
	AwayPeriodScore	M	N(2) 90	Score of the away competitor just for that period.	T3
UnitActions /UnitAction	Time	M	MM:SS 99:90	Time in minutes and seconds in which the action occurred. Time of the action. Ascending from the beginning (0:00) to the end (e.g.: H1+H2:60:00, OT1:70:00, OT2+PS:80:00)	T2
	Status	M	N, U, D	Status of the action for indicate if the action is new (N), update (U) or delete (D)	
UnitActions/ UnitAction/ Competitor/ Composition/ Athlete	Role	O	CC @ActionRole	Role of the player in the action, according to the available codes. It is specified in the codes sections which roles should be used for which actions.	T2, T4
Result	ResultType	M	CC @ResultType	Result type, either goals or IRM with points for the corresponding event unit.	T6,T7
	IRM	O	CC @IRM	IRM of the Team for the particular event unit. A team may be disqualified from the tournament due to breach of sport ethics, rules, etc Send just in the case @ResultType both Points and IRM (see codes section)	
	Result	O	N(2) 90	Result (totals goals in that game) of the Team for the particular event unit.	T6, T7
	WLT	O	CC @WLT	The code whether a competitor won or lost.	T6, T7



Element	Attribute	M/O	Value	Comments	LIVE_UPDATE RT trigger expected
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the Home team (1) and the Away team (2)	T6, T7
Result /Competitor/ EventUnitEntry	Code	M	E_HOME or E_AWAY	Key of the EventUnitEntry to uniquely identify if the Competitor is the Home or the Away Team	
Result /Competitor /Composition /Athlete	Order	M	Numeric	Sort by Uniform number	T2

The following table describes in more detail the UnitInfos /UnitInfo element in the case of Handball.

Element: UnitInfos /UnitInfo			
Type	Code	Value	Description
UI_HB	HB_ATTENDANCE	N(7) 999,990	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Number of spectators at the match
	HB_STATUS	CC @PeriodStatus	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Period status (see codes section)
	HB_PERIOD	CC @Period	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send current period

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
UI_HB /HB_ATTENDANCE	Number of spectators at the match	T8
UI_HB /HB_PERIOD	Current period	T1
UI_HB /HB_STATUS	Period Status	T1, T5, T6

The following table describes in more detail the UnitActions /UnitAction element in the case of Handball.

Element: UnitActions /UnitAction				
Type	Code	Pos	Value	Description
UAC_HB	CC @Period	N(3) 990	CC @Action	For @Type: Send proposed type
				For @Code: Send one period code.
				For @Pos: Unique sequential number for all the



Element: UnitActions /UnitAction				
Type	Code	Pos	Value	Description
				action from the first to the last one of a period.
				For @Value: Send one action code

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
UAC_HB /CC @Period	Actions in the game. If only one team is involved in the action there will be just one element Action. For Goal action send two Athletes elements: 1 st Scorer, 2 nd Assist (ActionRole=ASS). Just, if the Assist information available.	T2

The following table describes in more detail the UnitActions /UnitAction /ExtendedAction element in the case of Handball.

Element: UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
EA_HB	HB_SCR_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Home team score of the game after the action
	HB_SCR_A	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Away team score of the game after the action
	HB_LEAD_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Difference between the numbers of goals each team.
	HB_LEAD_A	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Difference between the numbers of goals each team.
	HB_WIN	S(1)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send H if the Home Team win Send A if the Away Team win



Element: UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
	HB_DEST_TYPE	CC @DestType	Send N if it is not more
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_SHOT_TYPE	CC @ShotType	For @Value: Shot destination: Top Left, Top Right..., and Bottom Left. In case of goal or shots saved. (see codes section)
			For @Type: Send proposed type
			For @Code: Send proposed code
	HB_SHOT_POS	CC @ShotPosition	For @Value: Description for not successful shots: Missed, Post, blocked, Saved. Just in case Shot (see codes section)
			For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Position, from where the shot did: Left 6m, ..., In Case Goal or Shot. (see codes section)

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
EA_HB /HB_SCR_H EA_HB /HB_SCR_A	Home/Away team score of the game after the action or score only for Penalty Shoot Out period. Only sent if a goal has been scored for the action.	T2
EA_HB /HB_LEAD_H EA_HB /HB_LEAD_A EA_HB /HB_WIN	Difference between the numbers of goals each team.	T2
EA_HB /HB_DEST_TYPE	Shot destination: Top Left, Top Right... Bottom Left. In case of goal or shots saved	T2
EA_HB /HB_SHOT_TYPE	Description for not successful shots: Missed, Post, blocked, Saved. Just in case Shot	T2
EA_HB /HB_SHOT_POS	Position, from where the shot did: Left 6m... In Case Goal or Shot.	T2

The following table describes in more detail the Result /Competitor /Stats /Stat element and its child element ExtendedStat in the case of Handball.

Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HB	HB_SHT		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Total Shots/penalties on goals for team in the event unit.
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goals.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage Efficiency (%).
	HB_SD HB_W HB_LD HB_PS HB_FB HB_BT HB_TOT		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the team in the event unit. Use HB_TOT for (6m + wing + 9m + 7m + Fast Breaks + Breakthroughs).
		HB_G		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total goal.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Saves.
		HB_M		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value:



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Total Missed.
		HB_P		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Post.
		HB_B		S(3)	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Total Blocked. If doesn't apply send "n/a"
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Shooting percentage (%).
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR		CC @PeriodNo	N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the teams in the event unit.
	HB_ASS HB_TO HB_ST HB_BLC HB_CAU HB_EXP HB_EXC HB_TO_TEAM		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit. Total turnovers bench/team in the event unit.
	HB_CAU_COA HB_EXP_COA HB_EXC_COA		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Yellow cards/Red cards/Exclusions for the Coach in the event unit.
	HB_TMS_COA			N(2) 90	For @Type: Send proposed type
				Or	For @Code: Send proposed code
				N(2)+ 90+	For @Pos: Do not send anything
					For @Value: 2 Minute Suspensions for the Coach in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_TMS		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
				Or	For @Code: Send proposed code
				N(2)+ 90+	For @Pos: Send the period number
					For @Value: 2 Minute Suspensions for the team in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_ATC		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total Attacks for the team in the event unit.
		HB_EA		N(3) 990	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Scoring Efficiency.
	HB_SHT_GK HB_SD_GK HB_W_GK HB_LD_GK HB_PS_GK HB_FB_GK HB_BT_GK (Only for Goalkeepers)		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Total shots / 6 metres/ wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs shots for the Goalkeepers in the event unit.
		HB_S		N(2) 90	For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code



Element: Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
		HB_EA		N(2) 90	For @Pos: Do not send anything
					For @Value: Total saves.
					For @Type: Send proposed code (as type)
					For @Code: Send proposed extension code
					For @Pos: Do not send anything
					For @Value: Efficiency (%).
	HB_TL_GK HB_ML_GK HB_BL_GK HB_TC_GK HB_MC_GK HB_BC_GK HB_TR_GK HB_MR_GK HB_BR_GK (Only for Goalkeepers)		CC @PeriodNo	N(2)/N(2) 90/90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send the period number
					For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right:
					Total Saves/Shots for the Goalkeepers in the event unit.

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT ST_HB /HB_SHT /HB_G ST_HB /HB_SHT /HB_EA	Total Shots, shots on goals made and the efficiency for team in the event unit.	T2
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT ST_HB /HB_TOT	Total 6 metres / Wing /9 metres /7 metres / Fast Breaks / Breakthroughs / Total shots for the team in the event unit. Use HB_TOT for (6m + wing +9m + 7m + Fast Breaks+ Breakthroughs).	T2
/HB_G /HB_S /HB_M /HB_P /HB_B /HB_EA	Total Goals, Saves, Missed, Post, Blocked and efficiency in 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs of Total shots for the team in the event unit.	T2
ST_HB /HB_TL ST_HB /HB_ML ST_HB /HB_BL ST_HB /HB_TC ST_HB /HB_MC ST_HB /HB_BC ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the team in the event unit.	T2
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_ST	Total assists/ Turnovers /steals/blocked/ yellow cards/ red cards/Exclusions in the event unit.	T2



Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_BLC ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC ST_HB /HB_TO_TEAM	Total turnovers bench/team in the event unit.	
ST_HB /HB_CAU_COA ST_HB /HB_EXP_COA ST_HB /HB_EXC_COA ST_HB /HB_TMS_COA	Yellow cards / red cards / Exclusions / 2 Minute Suspensions for the Coach in the event unit.	T2
ST_HB /HB_TMS	2 Minute Suspensions for the team in the event unit. Send + for "2 minutes + 2 minutes suspensions"	T2
ST_HB /HB_ATC /HB_EA	Total Attacks and the scoring efficiency for the team in the event unit.	T2
ST_HB /HB_SHT_GK ST_HB /HB_SD_GK ST_HB /HB_W_GK ST_HB /HB_LD_GK ST_HB /HB_PS_GK ST_HB /HB_FB_GK ST_HB /HB_BT_GK	Total shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers in the event unit.	T2
/HB_S /HB_EA	Total saves and Efficiency (%) for shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs.	T2
ST_HB /HB_TL_GK ST_HB /HB_ML_GK ST_HB /HB_BL_GK ST_HB /HB_TC_GK ST_HB /HB_MC_GK ST_HB /HB_BC_GK ST_HB /HB_TR_GK ST_HB /HB_MR_GK ST_HB /HB_BR_GK	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.	T2

The following table describes in more detail the Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult element in the case of Handball.

Element: Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult			
Type	Code	Value	Description
ER_HB	HB_POSITION	CC @Position	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Position player in the team. Only for GK

For the table above, we have the following additional/summary information:

Type /Code	Description	Expected
ER_HB /HB_POSITION	Position in the team. Only for GK	As soon as it is known

The following table describes in more detail the Result /Competitor /Composition /Athlete /Stats /Stat element and its child element ExtendedStat in the case of Handball.



Element: Result /Competitor /Composition /Athlete /Stats /Stat				
Type	Code	ExtendedStat Code	Value	Description
ST_HB	HB_SHT		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total Shots for athlete in the event unit.
		HB_G	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total goals.
		HB_EA	N(3) 990	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Shooting percentage Efficiency (%).
	HB_SD HB_W HB_LD HB_PS HB_FB HB_BT		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total 6 metres/ Wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs shots for the athlete in the event unit.
		HB_G	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total goal.
	HB_TOT			For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Do not send anything
		HB_M	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total misses.
		HB_P	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total post.
		HB_B	N(2) 90	For @Type: Send proposed code (as type)
				For @Code:



Element: Result /Competitor /Composition /Athlete /Stats /Stat				
Type	Code	ExtendedStat Code	Value	Description
				Send proposed extension code
				For @Value: Total blocked.
	HB_TL HB_ML HB_BL HB_TC HB_MC HB_BC HB_TR HB_MR HB_BR		N(2)/N(2) 90/90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the teams in the event unit.
	HB_ASS HB_TO HB_ST HB_BLC HB_CAU HB_EXP HB_EXC		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total assists/ turnovers /steals/ blocked/ yellow cards/ red cards/ Exclusions for the athlete in the event unit.
	HB_TMS		N(2) 90 Or N(2)+ 90+	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: 2 Minute Suspensions for the athlete in the event unit. Send + for "2 minutes + 2 minutes suspensions"
	HB_PTIME		HH:MM:SS 99:99:90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Time played for the athlete in the game.
	HB_SHT_GK HB_SD_GK HB_W_GK HB_LD_GK HB_PS_GK HB_FB_GK HB_BT_GK (Only Goalkeepers) for		N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Total shots / 6 metres/ wing/ 9 metres/ 7 metres/ Fast Breaks/ Breakthroughs shots for the Goalkeepers in the event unit.
		HB_S	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code
				For @Value: Total saves.
		HB_EA	N(2) 90	For @Type: Send proposed code (as type)
				For @Code: Send proposed extension code



Element: Result /Competitor /Composition /Athlete /Stats /Stat				
Type	Code	ExtendedStat Code	Value	Description
				For @Value: Efficiency (%).
	HB_TL_GK HB_ML_GK HB_BL_GK HB_TC_GK HB_MC_GK HB_BC_GK HB_TR_GK HB_MR_GK HB_BR_GK		N(2)/N(2) 90/90	For @Type: Send proposed type
				For @Code: Send proposed code
	(Only Goalkeepers) for			For @Value: Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.

For the table above, we have the following additional/summary information:

Type /Code /ExtendedStat Code	Description	Expected
ST_HB /HB_SHT ST_HB /HB_SHT /HB_G ST_HB /HB_SHT /HB_EA	Total Shots, shots on goals made and the efficiency for athlete in the event unit.	T2
ST_HB /HB_SD ST_HB /HB_W ST_HB /HB_LD ST_HB /HB_PS ST_HB /HB_FB ST_HB /HB_BT	Total 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs / Total shots for the athlete in the event unit.	T2
/HB_G	Total Goals in 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs shots for the athlete in the event unit.	T2
ST_HB /HB_TOT /HB_M /HB_P /HB_B	Total Missed, Post and Blocked in shots for the athlete in the event unit.	T2
ST_HB /HB_TL ST_HB /HB_ML ST_HB /HB_BL ST_HB /HB_TC ST_HB /HB_MC ST_HB /HB_BC ST_HB /HB_TR ST_HB /HB_MR ST_HB /HB_BR	Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Goals/Shots for the athlete in the event unit.	T2
ST_HB /HB_ASS ST_HB /HB_TO ST_HB /HB_ST ST_HB /HB_BLC ST_HB /HB_CAU ST_HB /HB_EXP ST_HB /HB_EXC	Total assists/ turnovers /steals/ blocked/ yellow cards/ red cards/ Exclusions for the athlete in the event unit.	T2
ST_HB /HB_TMS	2 Minute Suspensions for the athlete in the event unit. Send + for "2 minutes + 2 minutes suspensions"	T2
ST_HB /HB_PTIME	Time played for the athlete in the game where the athlete was participated.	T2,T4, T5
ST_HB /HB_SHT_GK ST_HB /HB_SD_GK ST_HB /HB_W_GK ST_HB /HB_LD_GK	Total shots / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs for the Goalkeepers in the event unit.	T2



Type /Code /ExtendedStat Code		Description	Expected
ST_HB /HB_PS_GK ST_HB /HB_FB_GK ST_HB /HB_BT_GK			
	/HB_S /HB_EA	Total saves and Efficiency (%) for saves / 6 metres / Wing / 9 metres / 7 metres / Fast Breaks / Breakthroughs.	T2
ST_HB /HB_TL_GK ST_HB /HB_ML_GK ST_HB /HB_BL_GK ST_HB /HB_TC_GK ST_HB /HB_MC_GK ST_HB /HB_BC_GK ST_HB /HB_TR_GK ST_HB /HB_MR_GK ST_HB /HB_BR_GK		Top/Middle/Bottom Left, Top/Middle/Bottom centre, Top/Middle/Bottom right: Total Saves/Shots for the Goalkeepers in the event unit.	T2

6.1.1.6 Message sort

Please, follow the general definition.



6.1.2 RT Clock

6.1.2.1 Description

This message is the RT Clock message as described in the ODF Sport Messages Interface Document.

6.1.2.2 Header Values

The definition in the ODF Sport Messages Interface Document is valid.

6.1.2.3 Trigger and Frequency

The following is the trigger for this message in ODF-RT:

- at the start and end of each period
- every time the clock starts and stops
- every 10 seconds

6.1.2.4 Message Structure

Please, follow the general definition.

6.1.2.5 Message Values

Please, follow the general definition.

6.1.2.6 Message sort

Please, follow the general definition.



7 PDF feed

The following chapter describes the ODF-PDF part of Handball.

7.1 PDF Applicable Messages

The next table is a full list of all ODF-PDF messages and describes the list of messages used in Handball the same way as it is done in the table of chapter 4.

Message Type	Message name	Message documented	Message used in this sport	Message extended in this document
DT_PDF	PDF messages, these messages includes a PDF file inside of them based in the ORIS (or PRIS) type	Sports	X	X
DT_PDF_GM	PDF Discipline/Venue good morning	Sports	X	
DT_PDF_GN	PDF Discipline/venue good night	Sports	X	
DT_PDF_SERIAL	List of Current PDF Serial	Sports	X	



7.1.1 DT PDF

7.1.1.1 Description

This message is the PDF message as described in the ODF Sport Messages Interface Document.

7.1.1.2 Header Values

The DocumentCode attribute in the ODF header will be sent according to the PDF as described in the ODF Common Codes document.

For PDF outputs which contain information for a single team, use DocumentSubcode to specify the Organisation code (NOC code) of the team. The DocumentCode attribute in the ODF header will be sent for all competition events according to the ODF Common Codes document (ODF Header Values sheet). (e.g., DT_PDF: C33 Team Roster; DT_PDF:C84x Team Statistics).

7.1.1.3 Trigger and Frequency

Please, follow the general definition.

7.1.1.4 Message Structure

Please, follow the general definition.

7.1.1.5 Message Values

Please, follow the general definition.

7.1.1.6 Message sort

Please, follow the general definition.



DOCUMENT CONTROL

Version history

Version	Date	Comments
R2 v1.0	3 Apr 2009	Submitted for review version
R2 v2.0	22 May 2009	Changes after the WNPA meeting and after Interface meeting.
R2 v3.0	19 Jun 2009	Document reformatted according to changes log Status changed to APP
R2 v3.1	17 Jul 2009	Some minor corrections
R2 v3.2	27 Nov 2009	Some minor corrections/improvements
R2 v3.3	23 Dec 2009	Some minor corrections/improvements
R2 v4.0	20 Jan 2011	London 2012 ORIS changes
R2 v5.0	06 May 2011	CR1461, changes detected during Pre Integration test, defects #36402 and #36104
R2 v5.1	08 Jul 2011	Some defects
R2 v5.2	03 Oct 2011	Some minor issues
R2 v6.0	09 Nov 2011	CR5076 and some minor issues
R2 v6.1	02 Dec 2011	Some minor defects
R2 v7.0	10 Feb 2012	IR101 and some minor issues
R2 v8.0	12 Mar 2012	CR5879 and some minor issues
R2 v9.0	13 Apr 2012	CR8511 and some minor issues
R2 v10.0	25 May 2012	CR8650, CR10586 and some minor issues

File reference: ODF/INT039-R2-v10.0 APP (HB)



Change Log

Version	Status	Changes on version
R2 v1.0	SFR	<ul style="list-style-type: none"> First version
R2 v2.0	SFA	<ul style="list-style-type: none"> Changes after the WNPA meeting <ul style="list-style-type: none"> Change "List of athletes by discipline" (DT_PARTIC_ATHLETES) by "List of participants by discipline" (DT_PARTIC), where this message is merging the messages list of athletes, list of officials and list of historical athletes. Change "List of athletes by discipline update" (DT_PARTIC_ATHLETES_UPDATE) by "List of participants by discipline update" (DT_PARTIC_UPDATE), where this message is merging the messages list of athletes update and list of officials update. Merge the messages "List of Teams" (DT_PARTIC_TEAMS) and "List of Historical teams" (DT_TEAMS_HISTORIC) in "List of Teams". Delete DT_ORGANISATIONS, DT_PARTIC_OFFICIALS, DT_PARTIC_OFFICIALS_UPDATE, DT_PARTIC_HISTORIC, DT_TEAM_HISTORIC. Add a new message DT_HIST_REC_UPDATE, DT_WEATHER Change after Interface meeting <ul style="list-style-type: none"> Codes: Change STR_GK by SRT_GK, 7MR by RFP, 7MC by PFP, 2MS by TMS, 2P2 by TPT, 2BP by TBP, SHO by SHT; Add STARTP for CIS/TV; Delete SCR from CC @ActionRole (not necessary because for goal we have an extra Action code "G"); Delete S and Add R from @EntryStatus; Add E for CC @PeriodStatus; Change the codes from @Period; Delete CC @PositionOrder; Change 6M BY sd, 9M by LD from CC @ShotPosition; Add T for CC @WLT Participants: Change HB_ by E_; Delete E_SHIRT and E_SHORT (These are Team Entry data) Teams: add E_Group (Until now the Group Info is missing in the X30. But is necessary for all the team sports); Add E_GK_SHIRT and E_GK_SHORT (for Team goalkeeper shirt and shorts colour) Start List: Delete _POSITION because it will be not changed during the match. Results: Delete _GOAL and _PENALTY from ExtendedPeriod (All the information can find in the UnitActions-Element); Change _ACTION by _[DD] from ExtendedAction.; Change the codes according with the Action's codes Pool/Final Ranking/Statistics: Made consistent the codes.
R2 v3.0	APP	<ul style="list-style-type: none"> Codes: Add "0" for the total statistics in @PeriodNo Participant: Delete _AGE because this information will be calculate Statistics: change Competition /Stats /Competitor by Competition /Stats /StatsItems /StatItem Status changed to APP
R2 v3.1	APP	<ul style="list-style-type: none"> Some minor corrections and added the copyright. Delete "equestrian" from the description of DT_PARTIC_HORSES_UPDATE



R2 v3.2	APP	<ul style="list-style-type: none">• Some minor corrections (spelling, etc).• Codes: CC @Statistics: included the codes that are used instead of the reference to the codes defined in the "Statistics" message.• In all the messages, the paths of the elements have been modified to include the entire route of each one.• Changed the name of the "List of accredited teams by discipline / List of accredited teams by discipline update" to "List of teams by discipline / List of teams by discipline update".• Start List: changed the comment of attribute @Order from the Officials /Official element. Added the code HB_UNIFORM (for RT) from the Start /Competitor /EventUnitEntry element. And added the code EUE_HB /HB_CAPTAIN (captain indicator) from the Start /Competitor /Composition /Athlete /EventUnitEntry element.• Event Unit Result: the type UAC_ACTION has been changed to UAC_HB in the UnitActions /UnitAction element.• Discipline configuration: Eliminated the optional element ExtendedConfigItem from the "Message Structure" section because it will not be included for HB. Comments added in all the attributes (Gender, Event, Phase and Unit) of the Configs /Config element.• RT Event Unit Results: the type UAC_ACTION has been changed to UAC_FB in the UnitActions /UnitAction element.
R2 v3.3	APP	<ul style="list-style-type: none">• Some minor corrections (spelling, etc).• Codes: have been added new codes that are used in the "Brackets" message as: CC @Bracket, CC @BracketItems, CC @CompetitorPlace and CC @Desc.• Pool Standings / Event Final Ranking: changed the value of the attribute "Rank" from Numeric to Text.• The "Brackets" message (DT_BRACKETS) has been added from this sport (it will be used in HB).• Event Unit Result / RT Event Unit Results: changed the @Pos length to N(3) for the code UAC_HB /CC @Period in the UnitActions /UnitAction element.
R2 v4.0	APP	<ul style="list-style-type: none">• Changes after the WNPA meeting:<ul style="list-style-type: none">▪ The Bib should be String• Participants: Add MainFunctionId and OfficialFunction; update the E_IRM• Teams: Delete E_AVG_AGE, E_AVG_HEIGHT, E_AVG_WEIGHT, E_AVG_INT_GAMES_P in Team messages (this is a cross sport change)• Results: Merge RT Data in PiT; Change UI_GAME and UI_PERIOD by UI_HB in the UnitInfo element; Removed the comments from the @SortOrder; change the formats;• Codes: Add comments for the official's codes. Those codes can be change when we have the new command codes; remove CC @EntryStatus• Ranking: Change the trigger• IR006<ul style="list-style-type: none">▪ Results: split HB_LEAD in HB_LEAD_H , HB_LEAD_V and HB_WIN▪ Pool: clarification for the @DocumentCode; Add @pos for _OPPONENT, change HB_DATE by HB_COMP_DATE and change HB_SCORE by HB_RES to be consistent with the other team's sports▪ Bracket: add a trigger▪ Statistics: Add a note in the Triggers and frequency section; Add the @DocumentSubcode for CUM messages to be consistent with the other sports.• Changes after the WNPA meeting (IR003):<ul style="list-style-type: none">▪ Event Final Ranking/Pool: Add the attribute RankEqual when there are an attribute Rank to identify if this is equalled or not.▪ Statistics: Add an element _ERANK when there are an attribute Rank to identify if this is equalled or not.▪ Result: Add a Result /Competitor/ EventUnitEntry• IR007:<ul style="list-style-type: none">▪ Results: Add a UnitAction@Status;• IR008:<ul style="list-style-type: none">▪ Codes: Change the code for Technical fault bench/team and Technical fault to be consistent with the other team's sports▪ Teams participants: Add a _SEED;▪ StartList: Update the value for HB_IRM element; Remove the HB_GAMES_P and HB_GOALS because that information is in Participant message



		<ul style="list-style-type: none"> Results: CC @PeriodNo must be at level of the Code node instead of extended element; split HB_LEAD in HB_LEAD_H, HB_LEAD_A and HB_WIN to be consistent with the other team's sports; Change HB_EFF by HB_EA to be consistent with the other team's sports Statistics: Change HB_EFF by HB_EA to be consistent with the other team's sports
		<ul style="list-style-type: none"> Changes after the WNPA meeting (IR022): <ul style="list-style-type: none"> Change the triggers and frequency as the revision of WNPA meeting Codes: add a format column to Section 3 of the Data Dictionaries; Add a Suspended status from CC @IRM; remove the Suspended status from CC @GameStatus
		<p>Changes after ORIS:</p> <ul style="list-style-type: none"> List of CC @Action adjusted List of CC @Function Added HB_TO stats code for turnovers Participants: Pos attribute added to E_POSITION to allow multiple positions. Teams: Added Pos 3 for third uniform colour Statistics: Added totals for Goalkeepers for the tournament.
R2 v5.0	APP	<ul style="list-style-type: none"> Codes: PTY code has been added in CC @Action. CC @Country has been added. Manager (AA20) has been added for DT_PARTICIPANT and Referee (RE) has been added for D_START_LIST in CC @Function code. List of participants by discipline / List of participants by discipline update: <ul style="list-style-type: none"> E_ENTRY /E_RESERVE code has been changed to E_ENTRY /E_SUBSTITUTE. E_ENTRY /E_CLUB_ORG value has been changed to CC @Country. Description has been changed for E_ENTRY /E_CAPTAIN and E_SUBSTITUTE. Start List: <ul style="list-style-type: none"> Referee shirt number has been removed. Event Unit Results / RT Event Unit Results: Some codes have been modified because there were discrepancies in the Stats codes between Point in Time and Real Time messages. Event Unit Results / Pool Standings: Trigger and Frequency section has been updated. CR1461:DT_RT_CLOCK message has been added
R2 v5.1	APP	<ul style="list-style-type: none"> List of teams by discipline (& update): Description has been updated for E_ENTRY /E_SHIRT and E_ENTRY /E_SHORTS. Statistics: <ul style="list-style-type: none"> Description for DocumentSubtype CUM has been updated. HB_TEAM_TF has been changed to HB_TF_TEAM to be consistent with Results messages. RT Event Unit Results: Comments about ResultStatus have been updated. All percentage values have been changed from N(2) to N(3) as the value could be 100.
R2 v5.2	APP	<ul style="list-style-type: none"> Codes: <ul style="list-style-type: none"> EXC code has been added. TF code has been changed to TO – Turnover. PTY code has been removed from CC @Action and added to CC @ShotPosition. Pool Standings / Event Final Ranking: RankEqual comment has been updated. Statistics: <ul style="list-style-type: none"> All HB_NOTE codes have been removed from Tournament Statistics and added to Individual Statistics. All references to “in the event unit” have been removed as statistics are not calculated at the event unit level. Some codes have been removed. RT Event Unit Results: Reference to Alpine Skiing has been removed.



R2 v6.0	APP	<ul style="list-style-type: none">• CR5076:<ul style="list-style-type: none">▪ Section for DT_PDF messages has been added with a sub-section for Header Values in special cases.• Event Unit Results:<ul style="list-style-type: none">▪ All HB_*_GRA codes have been removed as this information is not used in the C73.• Statistics:<ul style="list-style-type: none">▪ Attribute "Sort" has been changed to "Order" for Stats /Competitor and Stats /Competitor /Composition /Athlete in order to follow ODF Sport Messages Interface document.▪ ST_HB /HB_PTY_PTS code has been added again as it should not have been removed.▪ All ST_HB_GRA codes should be sent with ST_HB /HB_*_GRA.▪ Some errors in descriptions have been fixed.• RT Event Unit Results:<ul style="list-style-type: none">▪ All HB_*_GRA codes have been removed as this information is not used in the C73.
R2 v6.1	APP	<ul style="list-style-type: none">• Codes:<ul style="list-style-type: none">▪ All references to short and long distance have been removed.• Start List<ul style="list-style-type: none">▪ Reference to Officials /Official /ExtOfficial has been removed from Message Structure.
R2 v7.0	APP	<ul style="list-style-type: none">• IR101: DT_SERIAL message added in the PiT messages.• Codes:<ul style="list-style-type: none">▪ All references to values for CC@Function in DT_PARTIC have been removed because DT_PARTIC message has Accreditation data and we do not have control of what Functions Accreditation is going to use for a sport.• Statistics:<ul style="list-style-type: none">▪ The comment "in the event unit" has been removed from ST_HB /HB_TMS code.▪ The comment has been updated in ST_HB /HB_PTY_PTS /HB_AVR code.
R2 v8.0	APP	<ul style="list-style-type: none">• All HB_TF and HB_TF_TEAM codes have been changed to HB_TO and HB_TO_TEAM respectively because Technical Fault has been changed to Turnover.• Codes:<ul style="list-style-type: none">▪ TFT description has been changed to "Turnover bench/team" in CC @Action.▪ IN and OUT have been added in CC @ActionRole.• List of participants by discipline:<ul style="list-style-type: none">▪ E_ENTRY /E_POSITION code should be sent with Pos=1, 2 or 3.• List of teams:<ul style="list-style-type: none">▪ E_GK_SHIRT and E_GK_SHORTS codes should be sent with Pos=1, 2 or 3.• Start List (CR5879):<ul style="list-style-type: none">▪ EUE_HB /HB_UNIFORM code has been removed from Start /Competitor /EventUnitEntry element.• Event Unit Results:<ul style="list-style-type: none">▪ Team statistics and individual statistics have been split into two tables: Result /Competitor /Stats /Stat and Result /Competitor /Composition /Athlete /Stats /Stat.• Event Final Ranking:<ul style="list-style-type: none">▪ ER_HB /HB_GAMES /HB_TIED code has been added.• Statistics:<ul style="list-style-type: none">▪ ST_HB_GK /HB_MP code has been removed from Stats /Competitor /StatsItems /StatsItem element.▪ ST_HB_GK /HB_PTY and /HB_MP have been removed from Stats /Competitor /Composition /Athlete /StatsItems /StatsItem element.
R2 v9.0	APP	<ul style="list-style-type: none">• CR8511:<ul style="list-style-type: none">▪ RT Clock: Triggers have been updated.



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- Codes:
 - “F” for “Fault” has been added in CC @ShotType code entity (#69881).
 - List of participants:
 - E_ENTRY /E_POSITION code has been changed back to Pos=1 or 2 (#70977).

R2 v10.0	APP	<ul style="list-style-type: none">• CR8650:<ul style="list-style-type: none">▪ Codes: TCAU, TEXC and TEXP codes have been added, and TBP description has been updated to “Team/Bench 2 minute suspension”.• CR10586 (Statistics):<ul style="list-style-type: none">▪ ST_HB /HB_G_AS code should be sent with DocumentSubtype = IND_RANKING (#74104).▪ ST_HB /HB_ST /HB_AVR and ST_HB /HB_BLC /HB_AVR codes should be sent with DocumentSubtype = IND_RANKING (#74135).▪ ST_HB /HB_ST and ST_HB /HB_BLC descriptions have been added in the additional/summary information table (#74140).• Event Unit Results:<ul style="list-style-type: none">▪ EA_HB /HB_LEAD_A value has been updated to “Use - for home team lead, and + for visitor team lead” (#71892).▪ ST_HB /HB_TOT code has been added in Result /Competitor /Composition /Athlete /Stats /Stat element. (#60512).• Statistics:<ul style="list-style-type: none">▪ ST_HB /HB_PTY_PTS /HB_RANK value has been updated to “Athlete’s rank on average penalty points” (#71979).▪ ST_HB /HB_AVR code has been removed (#74134).
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