

Olympic Data Feed

ODF Hockey Data Dictionary for the XX Commonwealth Games

16 July 2013
Technology and Information Department
© International Olympic Committee



This document is based on information provided by the IOC to Glasgow 2014 and is subject to the terms and conditions of the license agreement entered into between the IOC and Glasgow, which is reproduced hereafter. The copyright of such document belongs to the IOC.

License

The document accompanying this license and the information contained therein (the Document), whether in a paper or electronic format, is made available to you subject to the terms stated below. By using and/or copying all or part of the Document, you (the licensee) agree that you will comply with the following terms and conditions.

1. You may, on a non-exclusive basis, use the Document only on the condition that you abide by the terms of this license. Subject to this condition and other terms and restrictions contained herein, the Document and the information contained therein may be used (i) to further develop the standards described in the Document for use in relation with the Olympic Games and/or (ii) to develop similar standards for other events than the Olympic Games (both (i) and (ii) are hereinafter designated as the Permitted Use, and works further developing these standards for the Olympic Games or developing similar standards for other events are hereinafter referred to as Derivative Works), and copies of the Document or of Derivative Works may be made and distributed for the purpose of the Permitted Use, PROVIDED THAT the COPYRIGHT and references to the IOC appearing in the Document and the TERMS OF THIS LICENSE are included on ALL such COPIES, and further PROVIDED THAT you do not charge any fee or any other monetary compensation for the distribution of the Document to others. The copyright and other intellectual property rights in the Document remain vested in the IOC and the IOC remains entitled to assert his copyright or other intellectual property rights in the Document against any person or entity who does not comply with the terms of this License.

2. A copy of any Derivative Work shall be provided to the IOC free of charge. Moreover, the IOC is granted a worldwide, perpetual, unrestricted, royalty-free non-exclusive license to use any Derivative Work for the further development of the standards made by or for the IOC in relation to the Olympic Games (these standards and the documents describing them are hereinafter referred to as Further Standards) and to make or have made all kinds of exploitation of the Further Standards, with the right to grant sub-licenses.

3. Except if reproduced in the Document, the use of the name and trademarks of the IOC is strictly prohibited, including, without limitation, for advertising, publicity, or in relation to products or services and their names. Any use of the name or trademarks of the IOC, whether registered or not, shall require the specific written prior permission of the IOC.

4. NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE REGARDING THE ACCURACY, ADEQUACY, COMPLETENESS, RELIABILITY OR USEFULNESS OF ANY INFORMATION CONTAINED IN THE DOCUMENT. The Document and the information contained herein are provided on an "as is" basis. THE IOC DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF NON-INFRINGEMENT OF PROPRIETARY RIGHTS, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL THE IOC BE LIABLE TO ANYONE FOR DAMAGES OF ANY KIND ARISING FROM OR RELATING TO YOUR ACQUISITION, USE, DUPLICATION, DISTRIBUTION, OR EXPLOITATION OF THE DOCUMENT OR ANY PORTION THEREOF, INCLUDING BUT NOT LIMITED TO, COMPENSATORY DAMAGES, LOST PROFITS, LOST DATA OR ANY FORM OF SPECIAL, INCIDENTAL, DIRECT, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES, WHETHER BASED ON BREACH OF CONTRACT OR WARRANTY, TORT OR OTHERWISE. THE IOC FURTHER DISCLAIMS ANY LIABILITY FOR ANY DAMAGE CAUSED WHEN THE DOCUMENT IS USED IN A DERIVATIVE WORK. The IOC further disclaims any liability regarding the existence or inexistence of any intellectual property or other rights that might be claimed by third parties with respect to the implementation or use of the technology or information described in the Document.

The same conditions as those described in this Section shall apply mutatis mutandis to the license granted to the IOC on the

Derivative Works in Section 2 above.

5. This License is perpetual subject to your conformance to its terms and conditions. The IOC may terminate this License immediately upon your breach of any of its terms and, upon such termination you will cease all use, duplication, distribution, and/or exploitation in any manner of the Document.

6. This License is governed by the laws of Switzerland. You agree that any disputes arising from or relating to this License will be resolved in the courts of Lausanne, Switzerland.

IF YOU DO NOT AGREE TO THESE TERMS YOU MUST CEASE ALL USE OF THE DOCUMENT NOW.

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	Point in Time.....	12
4.1	Point in Time Applicable Messages	12
4.1.1	List of participants by discipline/ List of participants by discipline update	14
4.1.1.1	Description.....	14
4.1.1.2	Header Values.....	14
4.1.1.3	Trigger and Frequency	14
4.1.1.4	Message Structure	14
4.1.1.5	Message Values	14
4.1.1.6	Message sort	16
4.1.2	List of teams /List of teams update	17
4.1.2.1	Description.....	17
4.1.2.2	Header Values.....	17
4.1.2.3	Trigger and Frequency	17
4.1.2.4	Message Structure	17
4.1.2.5	Message Values	17
4.1.2.6	Message sort	18
4.1.3	Start List.....	19
4.1.3.1	Description.....	19
4.1.3.2	Header Values.....	19
4.1.3.3	Trigger and Frequency	19
4.1.3.4	Message Structure	19
4.1.3.5	Message Values	19
4.1.3.6	Message sort	21
4.1.4	Event Unit Results	22
4.1.4.1	Description.....	22
4.1.4.2	Header Values.....	22
4.1.4.3	Trigger and Frequency	22
4.1.4.4	Message Structure	22
4.1.4.5	Message Values	22
4.1.4.6	Message sort	29
4.1.5	Pool standings of group in a team competition.....	30
4.1.5.1	Description.....	30
4.1.5.2	Header Values.....	30
4.1.5.3	Trigger and Frequency	30
4.1.5.4	Message Structure	30
4.1.5.5	Message Values	30
4.1.5.6	Message sort	33
4.1.6	Event Final Ranking.....	34
4.1.6.1	Description.....	34

4.1.6.2	Header Values	34
4.1.6.3	Trigger and Frequency	34
4.1.6.4	Message Structure	34
4.1.6.5	Message Values	34
4.1.6.6	Message sort	35
4.1.7	Statistics table	36
4.1.7.1	Description	36
4.1.7.2	Header Values	36
4.1.7.3	Trigger and Frequency	36
4.1.7.4	Message Structure	36
4.1.7.5	Message Values	36
4.1.7.6	Message sort	45
4.1.8	Brackets	46
4.1.8.1	Description	46
4.1.8.2	Header Values	46
4.1.8.3	Trigger and Frequency	46
4.1.8.4	Message Structure	46
4.1.8.5	Message Values	46
4.1.8.6	Message sort	47
4.1.9	Discipline Configuration	48
4.1.9.1	Description	48
4.1.9.2	Header Values	48
4.1.9.3	Trigger and Frequency	48
4.1.9.4	Message Structure	48
4.1.9.5	Message Values	48
4.1.9.6	Message sort	49
4.1.10	Event Unit Weather Conditions	50
4.1.10.1	Description	50
4.1.10.2	Header Values	50
4.1.10.3	Trigger and Frequency	50
4.1.10.4	Message Structure	50
4.1.10.5	Message Values	50
4.1.10.6	Message sort	50
5	Real time	51
5.1	Real Time Applicable Messages	51
5.1.1	RT Event Unit Results	52
5.1.1.1	Description	52
5.1.1.2	Header Values	52
5.1.1.3	Trigger and Frequency	52
5.1.1.4	Message Structure	52
5.1.1.5	Message Values	52
5.1.1.6	Message sort	59
5.1.2	RT Clock	60
5.1.2.1	Description	60
5.1.2.2	Header Values	60
5.1.2.3	Trigger and Frequency	60
5.1.2.4	Message Structure	60
5.1.2.5	Message Values	60
5.1.2.6	Message sort	60
6	PDF feed	61
6.1	PDF Applicable Messages	61
6.1.1	DT PDF	62
6.1.1.1	Description	62
6.1.1.2	Header Values	62
6.1.1.3	Trigger and Frequency	62



6.1.1.4	Message Structure	62
6.1.1.5	Message Values	62
6.1.1.6	Message sort	62
DOCUMENT CONTROL		63

1 Introduction

1.1 This document

This document is a Derivative Work (as defined in the License hereto) prepared by Glasgow 2014 Limited for the purpose of the XX Commonwealth Games.

1.2 Objective

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

1.3 Main Audience

The main audience of this document is the IOC as the ODF promoter, Glasgow 2014, 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

Acronym	Description
IF or International Federation	The international governing body of an Olympic Sport as recognized by the IOC
IOC	International Olympic Committee
IPC	International Paralympic Committee
CGA	Commonwealth Games Associations
ODF	Olympic Data Feed
ODF-PiT	Olympic Data Feed Point in Time, messages that are generated at certain point during competition
ODF-RT	Olympic Data Feed Real Time, messages that are generated when available
RSC	Results System Codes, determine uniquely one unit of the competition, specifying the discipline, gender, event, phase and unit.
Sport	is administered by an international federation and can be composed of one or more disciplines
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

Document Reference	Document Title	Document Description
		between the message 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/INT142	ODF General Messages Interface Document	This document describes the ODF general messages for the XX Commonwealth Games

2 Overall Perspective

2.1 Objective

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

2.2 End to End data flow

In the following sections, for each ODF General 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 Hockey.

Any ODF Hockey 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 General Messages Interface Document to know the format of these codes.

Code Entity	Code Entity Set of Values	
CC @Action	Code	Description
	SHT	Shot
	SHT_PC	Shot Penalty Corner
	SHT_PS	Shot Penalty Stroke
	SHT_SO	Shot Shoot-out (sent only during SOC period).
	PC	Penalty Corner
	NS	Penalty Corner No Shot
	GRN_C	Green Card
	YLW_C	Yellow Card
	RED_C	Red Card
	INJ	Injury
	SUS_E	Suspension ends
	SUBST	Substitution
	VTRR	Video Team Referrals Refused
	VTRU	Video Team Referrals Upheld
	VURD	Video Umpire Referral No Goal
VURG	Video Umpire Referral Goal	
CC @ActionRole	Code	Description
	IN	In
	OUT	Out
CC @Bracket	Code	Description
	FNL	Finals
CC @BracketItems	Code	Description
	SFL	Semi-finals
	FNL	Finals
CC @CompetitorPlace	Code	Description
	BYE	There is no competitor, the other team passes directly to the next round
	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

Code Entity	Code Entity Set of Values	
	0	Loser
	1	Winner
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 	
CC @IRM	Code	Description
	DSQ	Disqualified
	WD	Withdrawn
CC @Organisation	Defined in ODF Common Codes Document	
	See entity Organization <ul style="list-style-type: none"> The entity's attribute to be used is Code 	
CC @Period	Code	Description
	H1	First Half
	H2	Second Half
	SOC	Shoot-Out
CC @PeriodNo	Code	Description
	0	For the totals
	1	H1
	2	H2
	5	SOC
CC @PeriodStatus	Code	Description
	R	Running
	S	Stop (Break)
	E	Match End
CC @Position	Code	Description
	GK	Goalkeeper
	D	Defender
	M	Midfielder
	F	Forward
CC @ResAction	Code	Description
	M	Miss
	G	Goal
	S	GK save
	B	Player save
	P	Post
	F	Fault
CC @ResultsFunction	Defined in ODF Common Codes - Results Functions by Sport Document. <ul style="list-style-type: none"> The Attribute to be used is ID 	
CC @ResultType	Code	Description
	IRM_POINTS	For both, Points and invalid result mark
	POINTS	Points
CC @StartingCode	Code	Description
	X	Starting Player
	I	Substitute Player
CC @Statistics	Code	Description

Code Entity	Code Entity Set of Values	
	CUM	Cumulative Statistics of team and individual
	IND_RANKING	Ranking of Individual tournament statistics
	TEAM_RANKING	Ranking of Team tournament statistics
	TOU	Tournament Statistics
CC @VenueCode	Defined in ODF Common Codes Document See entity Venue <ul style="list-style-type: none"> The entity's attribute to be used is Code 	
CC @WLT	Code	Description
	L	Lost
	T	Tie
	W	Won

4 Point in Time

4.1 Point in Time Applicable Messages

The following table is a full list of all ODF messages and describes the list of messages used in Hockey, as well as the category of each message, which identifies if the message structure definition can be found in the ODF General 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 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 used in this sport	Message extended in this document
DT_SCHEDULE	Competition schedule	X	
DT_SCHEDULE_UPDATE	Competition schedule update	X	
DT_PARTIC	List of athletes by discipline	X	X
DT_PARTIC_UPDATE	List of athletes by discipline update	X	X
DT_PARTIC_TEAMS	List of teams	X	X
DT_PARTIC_TEAMS_UPDATE	List of teams update	X	X
DT_MEDALS	Medal standings	Global	
DT_MEDALLISTS_DAY	Medallists of the day	Global	
DT_HISTORIC_RECORD	Historical records		
DT_GLOBAL_GM	Global good morning	Global	
DT_GLOBAL_GN	Global good night	Global	
DT_START_LIST	Start List	X	X
DT_RESULT	Event Unit Results	X	X
DT_PHASE_RESULT	Phase Results		
DT_CUMULATIVE_RESULT	Cumulative Results		
DT_POOL_STANDING	Pool Standings of group in a team competition	X	X
DT_RANKING	Event Final ranking	X	X

Message Type	Message name	Message used in this sport	Message extended in this document
DT_STATS	Statistics table	X	X
DT_MEDALLISTS	Medallists of one event	X	
DT_MEDALLISTS_DISCIPLINE	Medallists by discipline	X	
DT_RECORD	Records		
DT_COMMUNICATION	Official Communication	X	
DT_BRACKETS	Brackets	X	X
DT_GM	Discipline/venue good morning	X	
DT_GN	Discipline/venue good night	X	
DT_FED_RANKING	Federation Ranking		
DT_CONFIG	Discipline Configuration	X	X
DT_WEATHER	Event Unit Weather conditions	X	X
DT_SERIAL	List of Current PiT Serial	X	

4.1.1 List of participants by discipline/ List of participants by discipline update

4.1.1.1 Description

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

4.1.1.2 Header Values

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

4.1.1.3 Trigger and Frequency

The definition in the ODF General Messages Interface Document is valid and in the case when the venue results becomes owner of the data.

4.1.1.4 Message Structure

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

- EventEntry

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

4.1.1.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Competition /Participant	Height	O	N(3) 999	It will be included if this information is available.
	Weight	O	N(3) 999	It will be included if this information is available.
Competition /Participant /Discipline /RegisteredEvent	Bib	O	S(2)	Shirt number. Although this attribute is optional, it will be updated and informed as soon as this information is known. Example: 8, 10 ...

The following table describes in more detail the EventEntry element in the case of Hockey.

Element: Competition /Participant /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
E_ENTRY	E_POSITION		CC @Position	For @Type: Send proposed type For @Code: Send proposed code For @Value: Position Code
	E_IRM		CC @EntryStatus	For @Type: Send proposed type For @Code: Send proposed code For @Value: Athlete's status in the team

Element: Competition /Participant /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
	E_CLUB_NAME		S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Club name
	E_CLUB_CITY		S(25)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Club City
	E_CLUB_ORG		CC @Country	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Club Country Code
	E_INT_GAMES_P		N(3) 999	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: International matches played
	E_INT_GOALS		N(3) 999	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Goals scored in international matches
	E_CAPTAIN		S(1)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Send "Y" in case the participant is a captain, "N" just if the value of the attribute has changed
	E_SUBSTITUTE		S(1)	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Value: Send "Y" if the competitor is an alternative player, "N" just if the value of the attribute has changed

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

Type /Code	Description	Expected
E_ENTRY /E_POSITION	Position Code in the Team	As soon as this information is known.
E_ENTRY /E_IRM	Invalid Result Mark	As soon as this information is known.
E_ENTRY /E_CLUB_NAME	Club Name	As soon as this information is known.
E_ENTRY /E_CLUB_CITY	Club city	As soon as this information is known.
E_ENTRY /E_CLUB_ORG	Club Country	As soon as this information is known.

Type /Code	Description	Expected
E_ENTRY /E_INT_GAMES_P	International matches played	As soon as this information is known.
E_ENTRY /E_INT_GOALS	Goals Scored in International games	As soon as this information is known.
E_ENTRY /E_CAPTAIN	Captain	As soon as this information is known.
E_ENTRY /E_SUBSTITUTE	Flag that indicates when the competitor is an alternate.	As soon as this information is known.

4.1.1.6 Message sort

Please follow the general definition.

4.1.2 List of teams /List of teams update

4.1.2.1 Description

This message is the List of accredited teams by discipline (and the update), for that discipline it is the list of teams, as described in the ODF General Messages Interface Document.

4.1.2.2 Header Values

The definition in the ODF General Messages Interface Document is valid

4.1.2.3 Trigger and Frequency

The definition in the ODF General Messages Interface Document is valid and in the case when the venue results becomes owner of the data.

4.1.2.4 Message Structure

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

- TeamOfficials and its child element
- EventEntry

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

4.1.2.5 Message Values

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

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

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

Element: Competition /Team /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
E_ENTRY	E_GROUP		String	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Do not send anything
E_SHIRT	N(1) 0		String	For @Value: Team's Group
				For @Type: Send proposed type
E_SHIRTS		N(1)	String	For @Code: Send proposed code
				For @Pos: Send 1,2 to indicate the number of the shirt
				For @Value: Shirt Colour
	E_SHORTS	N(1)	String	For @Type:

Element: Competition /Team /Discipline /RegisteredEvent /EventEntry				
Type	Code	Pos	Value	Description
		0		Send proposed type For @Code: Send proposed code For @Pos: Send 1,2 to indicate the number of the shorts/skirts For @Value: Shorts/Skirts Colour
	E SOCKS	N(1) 0	String	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send 1,2 to indicate the number of the socks For @Value: Socks Colour
	E_GK_SHIRT	N(1) 0	String	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send 1,2 to indicate the number of the shirt For @Value: Goalkeeper's Shirt Colour
	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_GROUP	Team's Group	As soon as this information is known.
E_ENTRY /E_SHIRT	Shirt colour	As soon as this information is known.
E_ENTRY /E_SHORTS	Shorts colour for men / Skirts colour for women	As soon as this information is known.
E_ENTRY /E SOCKS	Socks colour	As soon as this information is known.
E_ENTRY /E_GK_SHIRT	Goalkeeper's shirt colour	As soon as this information is known.
E_ENTRY /E_SEED	Seed Number	As soon as this information is known.

4.1.2.6 Message sort

Please follow the general definition.

4.1.3 Start List

4.1.3.1 Description

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

4.1.3.2 Header Values

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

4.1.3.3 Trigger and Frequency

Please follow the general definition.

4.1.3.4 Message Structure

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

- UnitDateTime (following the general rules for this element)
- Officials and its child element Official
- Coaches and its child element Coach
- Start /Competitor /EventUnitEntry

4.1.3.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Officials /Official	Function	M	CC @ResultsFunction	Send the umpires (2 Umpires, 1 Reserve Umpire and 1 Video Umpire) according to the codes
	Order	M	Numeric	Send by Order as on official score sheet
Start	StartOrder	M	Numeric	Send 1 for first named team, send 2 for second named team
	SortOrder	M	Numeric	Same @StartOrder
Start /Competitor /Coaches/Coach	Function	M	CC @Function	Coach function
	Order	M	Numeric	1 - Function (as per sample: manager, coach, stand-in manager, doctor, physiotherapist)
Start /Competitor /Composition /Athlete	Bib	M	S(2)	Shirt number
	Order	M	N(3) 990	Order the competitor should appear in the Start List. Start with starters, substitutes and then suspended.

The following table describes in more detail the Competition /Officials /Official /ExtOfficial element in the case of Hockey.

Element: Competition /Officials /Official /ExtOfficial			
Type	Code	Value	Description
EO_HO	HO_SHIRT	String	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Colour's Shirt

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

Type /Code	Description	Expected
EO_HO /HO_SHIRT	Colour's Shirt for the official	If it is available

The following table describes in more detail the Competition /Start /Competitor /EventUnitEntry element in the case of Hockey.

Element: Competition /Start /Competitor /EventUnitEntry			
Type	Code	Value	Description
EUE_HO	E_SHIRT	String	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Colour's Shirt
	E_SHORTS	String	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Colour's Shorts/Skirts
	E SOCKS	String	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Colour's Socks
	E_GK_SHIRT	String	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Goalkeeper's Shirt Colour

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

Type /Code	Description	Expected
EUE_HO / E_SHIRT	Colour's Shirt for the team	If it is available
EUE_HO / E_SHORTS	Colour's Shorts (for men) / Colour's Skirts (for women) for the team	If it is available
EUE_HO / E SOCKS	Colour's Socks for the team	If it is available
EUE_HO /E_GK_SHIRT	Goalkeeper's shirt colour	If it is available

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

Element: Competition /Start /Competitor /Composition /Athlete /EventUnitEntry			
Type	Code	Value	Description
EUE_HO	HO_SUSPENDED	S(1)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send 'Y' if the player is suspended

Element: Competition /Start /Competitor /Composition /Athlete /EventUnitEntry			
Type	Code	Value	Description
	HO_CAPTAIN	S(1)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send 'Y' only if the player is captain
	HO_AGE	N(2)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Age of the competitor
	HO_STARTER	S(1)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send "Y" if the competitor is a Starter

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

Type /Code	Description	Expected
EUE_HO /HO_SUSPENDED	Suspended players	Send just for those suspended players
EUE_HO /HO_CAPTAIN	Captain	Send the code just for the captain (when this information is known)
EUE_HO /HO_AGE	Player's Age	Always
EUE_HO /HO_STARTER	Starter player	Send just for those Starter players

4.1.3.6 Message sort

Please follow the general definition.

4.1.4 Event Unit Results

4.1.4.1 Description

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

4.1.4.2 Header Values

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

4.1.4.3 Trigger and Frequency

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

- After each period (half).
- After shootout competition (if any).
- After the match (unit).

4.1.4.4 Message Structure

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

- UnitDateTime (following the general rules for this element)
- UnitInfo
- Periods and its child element Period
- Period /ExtendedPeriod
- UnitActions and its child element UnitAction
- UnitAction /ExtendedAction
- UnitAction /Competitor
- UnitAction /Competitor /Composition /Athlete
- Competitor /Composition /Stats /Stat
- Competitor /Composition /Athlete /Stats /Stat
- Competitor /Composition /ExtendedResults /ExtendedResult

4.1.4.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Period	Code	M	CC @Period	
	HomeScore	M	N(3) 990	Overall score of the first named competitor at the end of the period.
	AwayScore	M	N(3) 990	Overall score of the second named competitor at the end of the period.
	HomePeriodScore	O	N(2) 90	Score of the first named competitor just for each period.
	AwayPeriodScore	O	N(2) 90	Score of the second named competitor just for each period.

Element	Attribute	M/O	Value	Comments
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 section which roles should be used for which actions.
Result	ResultType	M	CC @ResultType	Result type, either points or IRM with points for the corresponding event unit
	IRM	O	CC @IRM	IRM of the Team for the particular event unit Send just in the case @ResultType both Points and IRM (see codes section)
	Result	O	N(3) 990	Result of the Team for the particular event unit.
	WLT	O	CC @WLT	The code whether a competitor won, lost or tied.
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the First named (1) and the Visitor (2)

Send UnitDateTime including also the @EndDate attribute

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

Element: Competition /UnitActions /UnitAction				
Type	Code	Pos	Value	Description
UAC_HO	CC @Period	N(2) 90	CC @Action	For @Type: Send proposed type
				For @Code: Send one period code, except for TOT
				For @Pos: Unique sequential number for all the action of the period, from 1 to n (from the first action of the Set 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_HO /CC @Period	Actions in the game	Send always 2 minutes after half time and 2 minutes after the game

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

Element: Competition /UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
EA_HO	HO_RES_ACTION	CC @ResAction	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Result of the Action for the player/team
	HO_SCR_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: First named Score of the game after the action
	HO_SCR_A	N(2) 90	For @Type: Send proposed type

Element: Competition /UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
			For @Code: Send proposed code
			For @Value: Second named Score of the game after the action

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

Type /Code	Description	Expected
EA_HO /HO_RES_ACTION	Result of the Action for the player/team	Send always 2 minutes after half time and 2 minutes after the game
EA_HO /HO_SCR_H	First named Score of the match after the action	Send when the action of change score happen
EA_HO /HO_SCR_A	Second named Score of the match after the action	Send when the action of change score happen

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

Element: Competition /Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult			
Type	Code	Value	Description
ER_HO	HO_STARTER	S(1) (Y)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send "Y" if the competitor is a Starter
	HO_SUSPENDED	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send Y if the player has been Suspended

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

Type /Code	Description	Expected
ER_HO /HO_STARTER	Starter player	Always, if the information is available
ER_HO /HO_SUSPENDED	Suspended player	Always, if the information is available

The following table describes in more detail the Competition / Result /Competitor/ Stats /Stat elements in the case of Hockey for the team statistics.

Element: Competition / Result /Competitor/ Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HO	HO_TOTAL HO_FG HO_PC HO_PS		CC @PeriodNo		For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos

Element: Competition / Result /Competitor/ Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Do not send anything
		HO_GOALS		N(4) 9990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Goals
		HO_SHOTS		N(4) 9990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Shots
		HO_PERC		N(3) 990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Total Conversion percentage Send only for HO_TOTAL
	HO_GRN_C		CC@PeriodNo	N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send proposed pos For @Value: Total Green Cards
	HO_YLW_C		CC@PeriodNo	N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send proposed pos For @Value: Total Yellow Cards
	HO_RED_C		CC@PeriodNo	N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Send proposed pos For @Value: Total Red Cards
	HO_MIN		CC @PeriodNo	N(2)	For @Type:

Element: Competition / Result /Competitor/ Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
				90	Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Minutes Played
	HO_BP			N(3) 990	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Possession in %
	HO_ACP			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Attack Circle Penetration
	HO_VTR			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Video Team Referral
		HO_U		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Upheld
		HO_R		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Refused
	HO_NSUB			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything

Element: Competition / Result /Competitor/ Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Number of Substitutions

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

Type /Code	Description	Expected
ST_HO /HO_TOTAL	Total Goals/Total Shots /Conversion Percentage	Always, if the information is available, shots and goals must always be sent at the same time
ST_HO /HO_FG	Field Goal goals/shots	Always, if the information is available, shots and goals must always be sent at the same time
ST_HO /HO_PC	Penalty Corner goals/shots	Always, if the information is available, shots and goals must always be sent at the same time
ST_HO /HO_PS	Penalty Stroke goals/shots	Always, if the information is available, shots and goals must always be sent at the same time
ST_HO /HO_GRN_C	Green cards	Always, if the information is available
ST_HO /HO_YLW_C	Yellow cards	Always, if the information is available
ST_HO /HO_RED_C	Red cards	Always, if the information is available
ST_HO /HO_MIN	Minutes played	Always, if the information is available
ST_HO /HO_BP	Possession in %	Always, if the information is available
ST_HO /HO_ACP	Attack Circle Penetration	Always, if the information is available
ST_HO /HO_VTR	Total / Upheld / Refused Video Team Referral	Always, if the information is available
ST_HO /HO_NSUB	Number of Substitutions	Always, if the information is available

The following table describes in more detail the Competitor /Composition /Athlete /Stats /Stat element in the case of Hockey for the team statistics.

Element: Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HO	HO_TOTAL HO_FG HO_PC HO_PS	HO_GOALS		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Goals
	HO_SHOTS		N(2) 90		For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Shots
	HO_PERC				N(3) 990
For @Code: Send proposed ExtendedStat code					
For @Pos: Do not send anything					

Element: Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Conversion percentage (%) Send only for HO_TOTAL
	HO_GRN_C			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Green Card
	HO_YLW_C			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Yellow Cards
	HO_RED_C			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Red Cards
	HO_MIN			N(2) 90	For @Type: Send proposed type For @Code: Send proposed code For @Pos: Do not send anything For @Value: Minutes Played

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

Type /Code	Description	Expected
ST_HO /HO_TOTAL	Total Goals/Total Shots / Total Conversion percentage	Always, if the information is available
ST_HO /HO_FG	Field Goal goals/shots	Always, if the information is available
ST_HO /HO_PC	Penalty Corner goals/shots	Always, if the information is available
ST_HO /HO_PS	Penalty Stroke goals/shots	Always, if the information is available
ST_HO /HO_GRN_C	Green cards	Always, if the information is available
ST_HO /HO_YLW_C	Yellow cards	Always, if the information is available
ST_HO /HO_RED_C	Red cards	Always, if the information is available
ST_HO /HO_MIN	Minutes played	Always, if the information is available

4.1.4.6 Message sort

Please follow the general definition.

4.1.5 Pool standings of group in a team competition

4.1.5.1 Description

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

4.1.5.2 Header Values

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

DocumentSubtype attributes will be:

- Preliminary Round Group A: A
- Preliminary Round Group B: B

4.1.5.3 Trigger and Frequency

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

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

4.1.5.4 Message Structure

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

- Competitor /ExtendedResults and its child element ExtendedResult

4.1.5.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Result	Rank	O	Text	Rank at the group. 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 Send just in the case @ResultType is points and IRM (see codes section)
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the results for the group, if they were to be presented. It is mostly based on the rank, but it should be used to sort out disqualified teams.

The following table describes in more detail the Competition /Result /Competitor /ExtendedResults /ExtendedResult element

Element: Competition /Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
ER_HO	HO_OPPONENT		N(1) 9	CC @Organisation	For @Type: Send proposed type For @Code:

Element: Competition /Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
					Send proposed code
					For @Pos: Send a numeric, from 1 to n
					For @Value: Send the CGA of the opponent competitor
		HO_SCORE		N(2):N(2) 90:90	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Match result
		HO_DATE		Date	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Date of the match
	HO_GAMES	HO_PLAYED		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games played
		HO_WON		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games won
		HO_TIED		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games drawn
		HO LOST		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games lost
		HO_CP		N(2)	For @Type:

Element: Competition /Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
				90	Send proposed code For @Code: Send proposed Extension code For @Pos: Do not send anything For @Value: Send the classification points a team has accrued during the pool stage
	HO_RES	HO_WON		N(2) 90	For @Type: Send proposed code For @Code: Send proposed Extension code For @Pos: Do not send anything For @Value: Number of Goals for
		HO_LOST		N(2) 90	For @Type: Send proposed code For @Code: Send proposed Extension code For @Pos: Do not send anything For @Value: Number of Goals against
		HO_DIFF		+/-N(2) +/-90	For @Type: Send proposed code For @Code: Send proposed Extension code For @Pos: Do not send anything For @Value: Difference of goals for/against

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

Type /Code	Extension Code	Description	Expected
ER_HO /HO_OPPONENT		Competitor opponent at the group	If available, for all the opponent teams
	HO_SCORE	Match result	Just if the match has finished
	HO_DATE	Competition date of the match	Just if the match has not finished
ER_HO /HO_GAMES	HO_PLAYED	Number of games played by the team at the group	If available
	HO_WON	Number of games won by the team at the group	If available
	HO_TIED	Number of games drawn by the team at the group	If available
	HO_LOST	Number of games lost by the team at the group	If available
	HO_CP	Classification points	If available
ER_HO /HO_RES	HO_WON	Total of Goals For	If available
	HO_LOST	Total of goals against	If available
	HO_DIFF	Difference of goals for/against	If available

4.1.5.6 Message sort

Please follow the general definition.

4.1.6 Event Final Ranking

4.1.6.1 Description

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

4.1.6.2 Header Values

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

4.1.6.3 Trigger and Frequency

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

- After each event

4.1.6.4 Message Structure

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

- Competitor /ExtendedResults and its child element ExtendedResult

4.1.6.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Result	Rank	O	Text	Rank of the competitor in the result. It is optional because the team can be disqualified
	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 mostly based on the rank, but it should be used to sort out disqualified teams.

The following table describes in more detail the Competition /Result /Competitor /ExtendedResults /ExtendedResult element

Element: Competition /Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
ER_HO	HO_GAMES	HO_PLAYED		N(1)	For @Type: Send proposed code
				0	For @Code: Send proposed Extension code
				For @Pos: Do not send anything	
				For @Value: Send number of games played	
		HO_WON		N(1)	For @Type: Send proposed code
				0	For @Code: Send proposed Extension code
					For @Pos: Do not send anything

Element: Competition /Result /Competitor /ExtendedResults /ExtendedResult					
Type	Code	Extension Code	Pos	Value	Description
					For @Value: Send the number of games won
		HO_TIED		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games tied
		HO_LOST		N(1) 0	For @Type: Send proposed code
					For @Code: Send proposed Extension code
					For @Pos: Do not send anything
					For @Value: Send the number of games lost

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

Type /Code	Description	Expected
ER_HO /HO_GAMES /HO_PLAYED	Number of games played at the end of the event	Always, if available
ER_HO /HO_GAMES /HO_WON	Number of games won by the team at the end of the event	Always, if available
ER_HO /HO_GAMES /HO_TIED	Number of games tied by the team at the end of the event	Always, if available
ER_HO /HO_GAMES /HO_LOST	Number of games lost by the team at the end of the event	Always, if available

4.1.6.6 Message sort

Please follow the general definition.

4.1.7 Statistics table

4.1.7.1 Description

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

4.1.7.2 Header Values

The DocumentCode attribute in the ODF header will be sent for all the competition events according 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 CGA concatenated with the Team Number, e.g. BRA1. Concatenation will happen only when a CGA has more than one team.
- **TOU:** For Tournament statistics (like Tournaments Total statistics)
- **IND_RANKING:** Ranking of individual tournament statistics, for the best athletes.
- **TEAM_RANKING:** Ranking of team tournament statistics.

4.1.7.3 Trigger and Frequency

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

- After each match

4.1.7.4 Message Structure

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

- Competition /Stats /StatsItems and its child element StatsItem
- Stats /Competitor
- Competitor /StatsItems and its child element StatsItem
- Competitor /Composition /Athlete /StatsItems and its child element StatsItem

4.1.7.5 Message Values

The following table lists the Statistics table optional attributes (defined in the ODF General Messages Interface Document) that are used in the case of Hockey, 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 each team: 1 - Team CGA code; sort disqualified teams to the bottom of the list

Element	Attribute	M/O	Value	Comments
Stats /Competitor /Composition /Athlete	Order	M	N(3)	Sort order: Within the team the players are sorted: For each player: 1 - Goals per game (average) 2 - Games played 3 - Minutes per game 4 - Shirt number or disqualification identification 5 - Family name 6 - Given name; sort disqualified players to the bottom of the list

The following table describes in more detail the Competition /Stats /StatsItems /StatsItem

Element: Competition /Stats /StatsItems /StatItem						
Type	Code	ExtendedStat Code	Pos	Value	Description	
ST_HO	HO_TOTAL HO_FG HO_PC HO_PS			N(4) 9990	For @Type: Send proposed type	
					For @Code: Send proposed code	
					For @Pos: Do not send anything	
					For @Value: Send number of Goals, Field Goals, Penalty Corners, Penalty Strokes.	
	HO_GRN_C				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Total Green Cards
	HO_YLW_C				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Total Yellow Cards
	HO_RED_C				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Total Red Cards
	HO_VTR				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Total Video Team Referral
HO_U					N(2)	For @Type:

Element: Competition /Stats /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
				90	Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Upheld
		HO_R		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Refused
	HO_NSUB			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Number of Substitutions

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

Type /Code	ExtendedStat Code	Description	Expected
ST_HO /HO_TOTAL		Total Goals	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_FG		Field Goal goals	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_PC		Penalty Corner goals	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_PS		Penalty Stroke goals	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_GRN_C		Total Green cards	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_YLW_C		Total Yellow cards	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_RED_C		Total Red cards	Always, if the information is available for the DocumentSubtype=TOU
ST_HO /HO_VTR		Total / Upheld / Refused	Always, if the information is available for the DocumentSubtype=TOU
	HO_U	Video Team Referral	
	HO_R		
ST_HO /HO_NSUB		Number of Substitutions	Always, if the information is available for the DocumentSubtype=TOU

The following table describes in more detail the Competition /Stats /Competitor /StatsItems /StatsItem

Element: Competition /Stats /Competitor /StatsItems /StatsItem						
Type	Code	ExtendedStat Code	Pos	Value	Description	
ST_HO	HO_MP			N(2) 90	For @Type: Send proposed type	
					For @Code: Send proposed code	
					For @Pos: Do not send anything	
					For @Value: Matches Played	
	HO_IRM				CC @IRM	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: IRM code
	HO_TOTAL HO_FG HO_PC HO_PS				N(4) 9990	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Send number of goals, Field Goals, Penalty Corner, Penalty Strokes.
	HO_TOTAL_A HO_FG_A HO_PC_A HO_PS_A				N(4) 9990	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Send number of goals against, Field Goals against, Penalty Corner against, Penalty Strokes against.
	HO_GRN_C				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Total Green Cards
	HO_GRN_C_A				N(2) 90	For @Type: Send proposed type
For @Code: Send proposed code						
For @Pos: Do not send anything						
For @Value: Total Green Cards against						
HO_YLW_C				N(2) 90	For @Type: Send proposed type	
					For @Code: Send proposed code	

Element: Competition /Stats /Competitor /StatsItems /StatsItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Pos: Do not send anything
					For @Value: Total Yellow Cards
	HO_YLW_C_A			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Yellow Cards against
	HO_RED_C			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Red Cards
	HO_RED_C_A			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Red Cards against
	HO_TOTAL_GK HO_FG_GK HO_PC_GK HO_PS_GK	HO_SAVED		N(4) 9990	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
		HO_SHOTS			For @Pos: Do not send anything
					For @Value: Send number of goals, Field Goals, Penalty Corner and Penalty Strokes saved/ shots on goal Goalkeeper.
	HO_TOTAL_A_GK HO_FG_A_GK HO_PC_A_GK HO_PS_A_GK	HO_SAVED		N(4) 9990	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
		HO_SHOTS			For @Pos: Do not send anything
					For @Value: Send number of goals against, Field Goals against, Penalty Corner against and Penalty Strokes against saved/shots at goal Goalkeeper.
	HO_GRN_C_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything

Element: Competition /Stats /Competitor /StatsItems /StatsItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Total Green Cards Goalkeeper
	HO_GRN_C_A_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Green Cards against Goalkeeper
	HO_YLW_C_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Yellow Cards Goalkeeper
	HO_YLW_C_A_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Yellow Cards against Goalkeeper
	HO_RED_C_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Red Cards Goalkeeper
	HO_RED_C_A_GK			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Red Cards against Goalkeeper

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

Type /Code	Description	Expected
ST_HO /HO_MP	Total Match Played	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_IRM	Disqualification mark	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_TOTAL	Total Goals	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_FG	Field Goal Goals	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING

Type /Code	Description	Expected
ST_HO /HO_PC	Penalty Corner Goals	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_PS	Penalty Stroke Goals	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_TOTAL_A	Total Goals against	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_FG_A	Field Goal Goals against	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PC_A	Penalty Corner Goals against	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PS_A	Penalty Stroke Goals against	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_GRN_C	Total Green cards	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_YLW_C	Total Yellow cards	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_RED_C	Total Red cards	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_GRN_C_A	Total Green cards against	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_YLW_C_A	Total Yellow cards against	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_RED_C_A	Total Red cards against	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_TOTAL_GK /HO_SAVED /HO_SHOTS	Total Goals saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_FG_GK /HO_SAVED /HO_SHOTS	Field Goal Goals saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PC_GK /HO_SAVED /HO_SHOTS	Penalty Corner Goals saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PS_GK /HO_SAVED /HO_SHOTS	Penalty Stroke Goals saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_TOTAL_A_GK /HO_SAVED /HO_SHOTS	Total Goals against saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_FG_A_GK /HO_SAVED /HO_SHOTS	Field Goal Goals against saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PC_A_GK /HO_SAVED /HO_SHOTS	Penalty Corner Goals against saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_PS_A_GK /HO_SAVED /HO_SHOTS	Penalty Stroke Goals against saved/ shots at goal Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_GRN_C_GK	Total Green cards Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_YLW_C_GK	Total Yellow cards Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_RED_C_GK	Total Red cards Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_GRN_C_A_GK	Total Green cards against Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING
ST_HO /HO_YLW_C_A_GK	Total Yellow cards against Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING

Type /Code	Description	Expected
ST_HO /HO_RED_C_A_GK	Total Red cards against Goalkeeper	Always, if the information is available for the DocumentSubtype=CUM, TEAM_RANKING

The following table describes in more detail the Competition /Stats /Competitor /Composition /Athlete /StatsItems /StatItem

Element: Competition /Stats /Competitor /Composition /Athlete /StatsItems /StatItem						
Type	Code	ExtendedStat Code	Pos	Value	Description	
ST_HO	HO_OPPONENT			CC @Organisation	For @Type: Send proposed type	
					For @Code: Send proposed code	
	For @Pos: Do not send anything					
	For @Value: Send the CGA of the opponent competitor					
	HO_STARTER				CC @StartingCode	For @Type: Send proposed Stat code
						For @Code: Send proposed ExtendedStat code
						For @Pos: Do not send anything
						For @Value: Send the proposed Code
	HO_MP				N(2) 90	For @Type: Send proposed type
						For @Code: Send proposed code
						For @Pos: Do not send anything
						For @Value: Matches Played
HO_IRM				CC @IRM	For @Type: Send proposed type	
					For @Code: Send proposed code	
					For @Pos: Do not send anything	
					For @Value: IRM code	
HO_TOTAL HO_FG HO_PC HO_PS	HO_GOALS			N(4) 9990	For @Type: Send proposed Stat code	
					For @Code: Send proposed ExtendedStat code	
	For @Pos: Do not send anything					
	For @Value: Goals					
	HO_RANK				N(4) 9990	For @Type: Send proposed Stat code
						For @Code: Send proposed ExtendedStat code
For @Pos: Do not send anything						

Element: Competition /Stats /Competitor /Composition /Athlete /StatsItems /StatItem					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Value: Rank
	HO_TOTAL_GK HO_FG_GK HO_PC_GK HO_PS_GK	HO_SAVED		N(4) 9990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Saved
		HO_SHOTS		N(4) 9990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Shots at goal
	HO_CARDS	HO_RANK		N(4) 9990	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Rank by Cards issued
		HO_GRN_C HO_YLW_C HO_RED_C		N(2) 90	For @Type: Send proposed Stat code For @Code: Send proposed ExtendedStat code For @Pos: Do not send anything For @Value: Total Green, Yellow and Red Cards

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

Type /Code	ExtendedStat Code	Description	Expected
ST_HO /HO_OPONENT		CGA code for the opponent	Always, if the information is available for the DocumentSubtype= CUM
	HO_STARTER	Starting Code	
ST_HO /HO_MP		Total Match Played	Always, if the information is available for the DocumentSubtype= CUM
ST_HO /HO_IRM		Disqualification mark	Always, if the information is available for the DocumentSubtype=CUM
ST_HO /HO_TOTAL	HO_GOALS	Total Goals	Always, if the information is available for the DocumentSubtype=CUM
	HO_RANK	Total Rank	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HO /HO_FG	HO_GOALS	Field Goals	Always, if the information is available for the DocumentSubtype=CUM
	HO_RANK	Field Rank	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HO /HO_PC	HO_GOALS	Penalty Corner Goals	Always, if the information is available for the

Type /Code	ExtendedStat Code	Description	Expected
			DocumentSubtype=CUM
	HO_RANK	Penalty Corner Rank	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HO /HO_PS	HO_GOALS	Penalty Stroke Goals	Always, if the information is available for the DocumentSubtype=CUM
	HO_RANK	Penalty Stroke Rank	Always, if the information is available for the DocumentSubtype= IND_RANKING
ST_HO /HO_TOTAL_GK	HO_SAVED	Total Saved GK	Always, if the information is available for the DocumentSubtype=CUM
	HO_SHOTS	Total shots at goal GK	
ST_HO /HO_FG_GK	HO_SAVED	Field Saved GK	Always, if the information is available for the DocumentSubtype=CUM
	HO_SHOTS	Field shots at goal GK	
ST_HO /HO_PC_GK	HO_SAVED	Penalty Corner Saved GK	Always, if the information is available for the DocumentSubtype=CUM
	HO_SHOTS	Penalty Corner shots at goal GK	
ST_HO /HO_PS_GK	HO_SAVED	Penalty Stroke Saved GK	Always, if the information is available for the DocumentSubtype=CUM
	HO_SHOTS	Penalty Stroke shots at goal GK	
ST_HO /HO_CARDS	HO_RANK	Rank by Cards issued	Always, if the information is available for the DocumentSubtype= CUM
	HO_GRN_C HO_YLW_C HO_RED_C	Total Green, Yellow and Red Cards	Always, if the information is available for the DocumentSubtype= CUM
ST_HO /HO_GRN_C		Total Green cards	Always, if the information is available for the DocumentSubtype= CUM
ST_HO /HO_YLW_C		Total Yellow cards	Always, if the information is available for the DocumentSubtype= CUM
ST_HO /HO_RED_C		Total Red cards	Always, if the information is available for the DocumentSubtype= CUM

4.1.7.6 Message sort

Please follow the general definition.

4.1.8 Brackets

4.1.8.1 Description

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

4.1.8.2 Header Values

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

4.1.8.3 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

4.1.8.4 Message Structure

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

- ExtCompPlaces and its child element

Moreover, the following should be considered:

- BracketItem /NextUnit should be informed in the case of the classifications and semi-finals.
- BracketItem /NexUnitLoser should be informed just in the case of the semi-finals.
- CompetitorPlace /PreviousUnit should be informed in the case of the gold medal game and the bronze medal game and semi-finals.

4.1.8.5 Message Values

The following table lists the Brackets optional attributes (defined in the ODF General Messages Interface Document) that are used in the case of Hockey, 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. It is referred to the classifications, semifinals or finals phases.
Bracket /BracketItems /BracketItem	Code	M	N(2) 90	It will be sent the game number for each bracket item (e.g.: 17, 18, 19, 20 ...)
Bracket /BracketItems /BracketItem /CompetitorPlace	Code	O	CC @CompetitorPlace	It will be sent when there is no competitor team (BYE) o when it is not known yet (UNK).

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

Element: Competition /Bracket /BracketItems /BracketItem /CompetitorPlace /ExtCompPlaces /ExtCompPlace				
Type	Code	Pos	Value	Description
ECP_HO	HO_COMP_INF	CC @Desc	N(2) 90	For @Type: Send proposed type
				For @Code: Send proposed code
				For @Pos: Send if the competitor is group, winner or loser
				For @Value: Send the game number

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

Type /Code	Description	Expected
ECP_HO /HO_COMP_INF	The competitor is the winner or the loser of the specified game number	Just when the competitor is not known yet (when the CompetitorPlace @Code is UNK)

4.1.8.6 Message sort

Please follow the general definition.

4.1.9 Discipline Configuration

4.1.9.1 Description

This message is the Discipline Configuration message as described in the ODF General Messages Interface Document.

4.1.9.2 Header Values

Please follow the general definition.

4.1.9.3 Trigger and Frequency

Please follow the general definition.

4.1.9.4 Message Structure

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

- ExtendedConfigItem

4.1.9.5 Message Values

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

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

Element: Competition /Configs /Config /ExtendedConfig						
Type	Code	ExtendedConfigItem Code	Pos	Value	Description	
EC_HO	HO_VENUE (send by discipline)			CC @VenueCode	For @Type: Send proposed type	
					For @Code: Send proposed code	
	For @Pos: Do not send anything					
	For @Value: Send a venue code					
	HO_CAPACITY				N(3),N(3) 999,990	For @Type: Send proposed code
						For @Code: Send proposed ExtendedConfigItem code
						For @Pos: Do not send anything
						For @Value: Venue Public capacity
	HO_NUMBER_EVENTS (send by discipline)				N(1) 0	For @Type: Send proposed type
For @Code: Send proposed code						
For @Pos: Do not send anything						
For @Value: Total number of events for the discipline						
HO_MATCH_NUMBER (send by event unit)				N(2) 90	For @Type: Send proposed type	
					For @Code: Send proposed code	

Element: Competition /Configs /Config /ExtendedConfig					
Type	Code	ExtendedConfigItem Code	Pos	Value	Description
					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_HO /HO_VENUE	Venue Public Capacity for the Venue of the message header	If available
EC_HO /HO_NUMBER_EVENTS	Total number of events for the discipline	If available
EC_HO /HO_MATCH_NUMBER	Match Number	If available

4.1.9.6 Message sort

Please follow the general definition.

4.1.10 Event Unit Weather Conditions

4.1.10.1 Description

This message is the Event Unit Weather Conditions message as described in the ODF General Messages Interface Document.

4.1.10.2 Header Values

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

4.1.10.3 Trigger and Frequency

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

- At least one (1) hour before the match.

4.1.10.4 Message Structure

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

- Competition /Weather /Conditions /Condition (following the general rules for this element)

4.1.10.5 Message Values

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

Element	Attribute	M/O	Value	Comments
Weather /Conditions	Code	M	GL	GL for generically, because this information will only be measured once.
	Humidity	M	N(3) 990	Humidity in %
	Wind_Direction	M	CC @WindDirection	Wind direction
Weather /Conditions /Condition	Code	M	SKY	Weather condition type
	Value	M	CC @WeatherCondition	Codes that describe the Weather Condition, they depend on the @Code
Weather /Conditions /Temperature	Code	M	AIR	Air
	Unit	M	CC @TemperatureUnit	Metric system unit for temperature
	Value	M	N(2) 90	Wind speed in @Unit degrees.

4.1.10.6 Message sort

Please follow the general definition.

5 Real time

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

5.1 Real Time Applicable Messages

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

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

5.1.1 RT Event Unit Results

5.1.1.1 Description

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

5.1.1.2 Header Values

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

5.1.1.3 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 one player is substituted out
 - T5: Trigger at the end of one period
 - T6: Trigger when a team is disqualified
 - T7: Trigger at the end of one match
- ResultStatus="LIVE_FULL"
 - This value should be suggested and sent in the DT_RT_GM message after further testing
- For other ResultStatus, follow the general definition.

5.1.1.4 Message Structure

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

- UnitInfos and its child elements UnitDateTime and UnitInfo
- Periods and its child element Period
- UnitActions and its child element UnitAction
- UnitAction /Competitor
- UnitAction /Competitor /Composition and its child elements Athlete

Please follow the general considerations for all ResultStatus.

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

5.1.1.5 Message Values

The following table describes in more detail the Result element.

Element	Attribute	M/O	Value	Comments	LIVE_UPDATE RT trigger expected
Period	Code	M	CC @Period		T3

Element	Attribute	M/O	Value	Comments	LIVE_UPDATE RT trigger expected
	HomeScore	M	N(3) 990	Overall score of the first named competitor at the end of the period.	T3
	AwayScore	M	N(3) 990	Overall score of the second named competitor at the end of the period	T3
	HomePeriodScore	O	N(3) 990	Score of the first named competitor just for this period at this moment in time (for all periods except for TOT)	T3
	AwayPeriodScore	O	N(3) 990	Score of the second named competitor just for this period at this moment in time (for all periods except for TOT)	T3
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 section which roles should be used for which actions.	T2 (for an assistant player)
Result	ResultType	M	CC @ResultType	Result type, either points or IRM with points for the corresponding event unit	T6 or T7
	IRM	O	CC @IRM	IRM of the Team for the particular event unit Send just in the case @ResultType both Points and IRM (see codes section)	T6
	Result	O	N(3) 990	Result of the Team for the particular event unit.	T7
	WLT	O	CC @WLT	The code whether a competitor won, lost or tied.	T7
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the First named (1) and the Visitor (2)	T6 or T7

Send UnitDateTime

The following table describes in more detail the UnitInfo element in the case of Hockey.

Element: Competition /UnitInfos /UnitInfo			
Type	Code	Value	Description
UI_HO	HO_PERIOD	CC @Period	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send current period
	HO_STATUS	CC @PeriodStatus	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send period Status

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

Type /Code	Description	Expected
UI_HO /HO_PERIOD	Send current period	T1
UI_HO /HO_STATUS	Send period status	T1,T5,T7

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

Element: Competition /UnitActions /UnitAction				
Type	Code	Pos	Value	Description
UAC_HO	CC @Period	N(2) 90	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	LIVE_UPDATE RT trigger expected
UAC_HO /CC @Period	Actions in the game	T2

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

Element: Competition /UnitActions /UnitAction /ExtendedAction			
Type	Code	Value	Description
EA_HO	HO_RES_ACTION	CC @ResAction	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Result of the Action for the player/team
	HO_SCR_H	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: First named Score of the game after the action
	HO_SCR_A	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Second named Score of the game after the action

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

Type /Code	Description	LIVE_UPDATE RT trigger expected
EA_HO /HO_RES_ACTION	Result of the Action for the player/team	T2

Type /Code	Description	LIVE_UPDATE trigger expected	RT
EA_HO /HO_SCR_H	First named Score of the match after the action	T2	
EA_HO /HO_SCR_A	Second named Score of the match after the action	T2	

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

Element: Competition /Result /Competitor /Composition /Athlete /ExtendedResults /ExtendedResult			
Type	Code	Value	Description
ER_HO	HO_STARTER	S(1) (Y)	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send "Y" if the competitor is a Starter
	HO_SUSPENDED	N(2) 90	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Send Y if the player has been Suspended

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

Type /Code	Description	LIVE_UPDATE RT trigger expected
ER_HO /HO_STARTER	Starter player	T2
ER_HO /HO_SUSPENDED	Suspended player	T2

The following table describes in more detail the Competition /Result /Competitor /Stats /Stat element in the case of Hockey for the team statistics.

Element: Competition /Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
ST_HO	HO_TOTAL HO_FG HO_PC HO_PS		CC @PeriodNo		For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Do not send anything
					For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
	HO_GOALS		N(2) 90	For @Pos: Do not send anything	
				For @Value: Goals	
				For @Type: Send proposed Stat code	
HO_SHOTS		N(2) 90	For @Code:		
			For @Type: Send proposed Stat code		

Element: Competition /Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Shots
		HO_PERC		N(3) 990	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Total Conversion percentage (%) Send only for HO_TOTAL
	HO_GRN_C		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Green Card
	HO_YLW_C		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Yellow Cards
	HO_RED_C		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Red Cards
	HO_MIN		CC @PeriodNo	N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Send proposed pos
					For @Value: Minutes Played
	HO_BP			N(3) 990	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Possession in %
	HO_ACP			N(2)	For @Type:

Element: Competition /Result /Competitor /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
				90	Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Attack Circle Penetration
	HO_VTR			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Total Video Team Referral
		HO_U		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Upheld
		HO_R		N(2) 90	For @Type: Send proposed Stat code
					For @Code: Send proposed ExtendedStat code
					For @Pos: Do not send anything
					For @Value: Refused
	HO_NSUB			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Number of Substitutions

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

Type /Code	Description	Expected
ST_HO /HO _TOTAL	Total Goals/Total Shots / Total Conversion percentage	T2 (if changed)
ST_HO /HO_FG	Field Goal goals/shots	T2 (if changed)
ST_HO /HO_PC	Penalty Corner goals/shots	T2 (if changed)
ST_HO /HO_PS	Penalty Stroke goals/shots	T2 (if changed)
ST_HO /HO_GRN_C	Green cards	T2 (if changed)
ST_HO /HO_YLW_C	Yellow cards	T2 (if changed)
ST_HO /HO_RED_C	Red cards	T2 (if changed)
ST_HO /HO_MIN	Minutes played	T4,T5
ST_HO /HO_BP	Possession in %	T2 (if changed)

Type /Code	Description	Expected
ST_HO /HO_ACP	Attack Circle Penetration	T2 (if changed)
ST_HO /HO_VTR	Total / Upheld / Refused Video Team Referral	T2 (if changed)
ST_HO /HO_NSUB	Number of Substitutions	T2 (if changed)

The following table describes in more detail the Competition /Result /Competitor /Composition /Athlete /Stats /Stat element in the case of Hockey for the team statistics.

Element: Competition /Result /Competitor /Composition /Athlete /Stats /Stat						
Type	Code	ExtendedStat Code	Pos	Value	Description	
ST_HO	HO_TOTAL HO_FG HO_PC HO_PS	HO_GOALS		N(2) 90	For @Type: Send proposed Stat code	
					For @Code: Send proposed ExtendedStat code	
					For @Pos: Do not send anything	
						For @Value: Goals
		HO_SHOTS			N(2) 90	For @Type: Send proposed Stat code
	For @Code: Send proposed ExtendedStat code					
	For @Pos: Do not send anything					
						For @Value: Shots
		HO_PERC			N(3) 990	For @Type: Send proposed Stat code
	For @Code: Send proposed ExtendedStat code					
	For @Pos: Do not send anything					
						For @Value: Total Conversion percentage (%) Send only for HO_TOTAL
	HO_GRN_C			N(2) 90	For @Type: Send proposed type	
For @Code: Send proposed code						
For @Pos: Do not send anything						
					For @Value: Green Card	
	HO_YLW_C			N(2) 90	For @Type: Send proposed type	
For @Code: Send proposed code						
For @Pos: Do not send anything						
					For @Value: Yellow Cards	
	HO_RED_C			N(2) 90	For @Type: Send proposed type	
					For @Code: Send proposed code	

Element: Competition /Result /Competitor /Composition /Athlete /Stats /Stat					
Type	Code	ExtendedStat Code	Pos	Value	Description
					For @Pos: Do not send anything
					For @Value: Red Cards
	HO_MIN			N(2) 90	For @Type: Send proposed type
					For @Code: Send proposed code
					For @Pos: Do not send anything
					For @Value: Minutes Played

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

Type /Code	Description	Expected
ST_HO /HO_TOTAL	Total Goals/Total Shots / Total Conversion percentage	T2 (if changed)
ST_HO /HO_FG	Field Goal goals/shots	T2 (if changed)
ST_HO /HO_PC	Penalty Corner goals/shots	T2 (if changed)
ST_HO /HO_PS	Penalty Stroke goals/shots	T2 (if changed)
ST_HO /HO_GRN_C	Green cards	T2 (if changed)
ST_HO /HO_YLW_C	Yellow cards	T2 (if changed)
ST_HO /HO_RED_C	Red cards	T2 (if changed)
ST_HO /HO_MIN	Minutes played	T4,T5

5.1.1.6 Message sort

Please follow the general definition.

5.1.2 RT Clock

5.1.2.1 Description

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

5.1.2.2 Header Values

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

5.1.2.3 Trigger and Frequency

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

- at the start of each period
- every 5 minutes

5.1.2.4 Message Structure

Please, follow the general definition.

5.1.2.5 Message Values

Please, follow the general definition.

5.1.2.6 Message sort

Please, follow the general definition.

6 PDF feed

Please refer to the same section of the ODF General Messages Interface Document.

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

6.1 PDF Applicable Messages

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

Message Type	Message name	Message used in this sport	Message extended in this document
DT_PDF	PDF Message	X	X
DT_PDF_GM	PDF Discipline/Venue good morning	X	
DT_PDF_GN	PDF Discipline/Venue good night	X	
DT_PDF_SERIAL	PDF Serial message	X	

6.1.1 DT PDF

6.1.1.1 Description

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

6.1.1.2 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 (CGA 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).

6.1.1.3 Trigger and Frequency

Please follow the general definition.

6.1.1.4 Message Structure

Please follow the general definition.

6.1.1.5 Message Values

Please follow the general definition.

6.1.1.6 Message sort

Please follow the general definition.

DOCUMENT CONTROL

Version history

Version	Date	Comments
R1 v1.0	14 Jun 2013	First version SFR
R1 v1.1	08 Jul 2013	SFA
R1 v1.2	16 Jul 2013	APP

File reference: ODF/INT129 R1 v1.2 APP (HO)

Change Log

Version	Status	Changes on version
R1 v1.0	SFR	<ul style="list-style-type: none"> • First version
R1 v1.1	SFA	<ul style="list-style-type: none"> • All references to “ODF Sport Messages Interface Document” have been changed to “ODF General Messages Interface Document”. • All references to Extra times have been removed as per FIH Regulations. • All references to “Shoot-out” have been changed to “Shootout Competition”.
R1 v1.2	APP	<ul style="list-style-type: none"> • Approved version



This page has been intentionally left blank