

Olympic Data Feed

ODF Ice Hockey Dictionary

24 November 2009 Technology Department © International Olympic Committee

ODF/INT012-R1 v6.1 APP



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DOCUMENT CONTROL

Version history

Version	Date	Comments
1.0	09 June 2008	Submitted for review version
1.1	17 June 2008	Changes according to the changes log
1.2	7 July 2008	Changes according to changes log
		Version changed to SFA
R1 V1.0	14 July 2008	Document version reformatted according to changes log
		Status changed to APP
R1 V2.0	17 October 2008	Changes after the WNPA meeting held on October 1-2
R1 V2.1	15 December 2008	Some errors corrected
R1 V2.2	3 April 2009	Some corrections in the actions
R1 V3.0	8 May 2009	CR550 (IIHF requests)
R1 V4.0	8 July 2009	CR820 (Changes after Homologation, CR721 Add messages of Updates for Athletes, officials, teams.) and added the copyright.
R1 V5.0	7 August 2009	CR875 Changes after Homologation Test
R1 V6.0	18 September 2009	Apply the CR1006 that are some changes in ODF documents after Homologation Test.
R1 V6.0	24 November 2009	New Penalty description

File reference: ODF/INT012-R1 v6.1 APP



Change Log

Version	Status	Changes on version
1.0	SFR	First version
1.1	SFR	 Chapter I.1.1. CC @PenaltyDesc: Added new BENCH code Chapter I.1.1. CC @WLT: Removed T and added OTW and OTL codes Chapter I.1.5.3. Start list: Added new event unit entries (captain, captain assistant and startesrs) and updated trigger to send this information when available. Chapter I.1.6.5. Minor changes of spelling (shot instead of shoot) Chapter I.1.11.4: Brackets message: Women's classification games are #17 and #15 (not #18)
1.2	SFA	 General: Renamed some wrong references to "End" by "Period" General: triggers. Clarified that in the redefined triggers, messages should also be triggered after major changes Chapter I.1.5. Message start list: Element Competitor /EventUnitEntry. Wrong references to the attribute Value, while this attribute is not used in this case. Chapter I.1.7: Message statistics: Individual (IND) statistics messages grouped in one single IND message (as well as IND_BEST), to avoid resending all athletes in several different types of individual messages. Besides, added sort codes based on rank codes to allow sorting by rank (also rank ties), in both team and individual statistics Chapter I.1.11: Message Brackets. Corrected some typos, since these messages made references to event /event unit messages.
R1 V1.0	APP	 Versioning changed to Rr Vv1.v2, where r is release, and constant number for the documentation until the end of the Olympic Games, v1 refers to the part 1 of the document and v2 refers to the part 2 of the document
R1 V2.0	APP	 Please, review changes in the messages' generic structure in the ODF Central Messages and ODF Sport Messages Interface documents as well as ODF header redefinition. Removed part II for other competitions, and renumbered all chapters according to this circumstance. Added new messages DT_HISTORIC_RECORD, DT_GLOBAL_GM, DT_GLOBAL_GN, DT_GM and DT_GN in table of chapter 4 Applicable Messages. Extended DT_GM and DT_GN messages to redefine ODF header DocumentCode attribute. The attribute RSC in the ODF header has been renamed as DocumentCode according to the new ODF header definition
R1 V2.1	APP	 Corrected error to include the tie possibility in chapter 3 as a code for the intermediate results Chapter 5.4.4. Removed references to optional elements Competitor /ExtendedResults /ExtendedResult and "Competitor /Composition /Athlete /Stats /Stat, which were mentioned but not used afterwards in the DT_RESULT message for Ice Hockey Chapter 5.5.: Added some codes for IND statistics to sort out from the ranks
R1 V2.2	APP	Update the element UnitAction to unify it with all the teams sports in the chapter 5.4.5
R1 V3.0	APP	 Change the code of CC@GoalType: SHG by SH1 (Short handed – 1 player) and SH2 (Short handed – 2 players) Change the description "Number of games played" by "Games played indeed" in all document. Delete E_ACCRED_DATE data form the List of participant Athletes because it will not send. Add a new code for CC @Assignment in the Codes (section 3) for Emergency Goalkeeper. And update the description for the Tie in the code CC @WLT.



Change Log

Version	Status	Changes on version
		 In the Start List message, clarify some descriptions in the Trigger and Frequency section and clarify the Order attribute in Officials/Official. And correct some comments in the description of the suspended players. Add the comment, after the Gold Medal game for the IND_BEST in the statistics message. Rewording some paragraphs in the Pool Standing message for the section Trigger and Frequency. Add a table for Competitor /Composition /Athlete that clarify the Order attribute in the DT_POOL_STANDING and DT_RANKING. Clarify the section Trigger and Frequency for the Event Final Ranking and Bracket messages. Clarify the Message Structure for the UnitDateTime in the Event Unit Result message.
R1 V4.0	APP	 Add a new code E_ENTRY_STATUS in the List of accredited participants Athlete. Modify the value of the Competitor @Code element for group the Individual
		 statistics by team (and order also by team). Change the description in the Codes Section for GK (in CC@Action), GK_IN and GK_OUT (in CC@ActionRole).
		 Add a new comment in the Triggers and Frequency section for the start list message.
		 In the Event Unit Result message update the description of the attribute Result, and update the description (of value and the expected column) in the code IH_RES.
		 Change the format of the code IH_TPP in the results and statistics messages. Add three new messages for update Athletes, Officials and Teams data. Add the copyright.
R1 V5.0	APP	Add a new code "PS" in the entry CC @GoalType for Penalty Shot in the section Code.
		 Add third criteria (lowest GP) in the IH_RNK_SCORE, IH_RNK_A and IH_RNK_GOAL description for Statistics message.
R1 V6.0	APP	Add the element CompetitorPlace/Competitor /Composition as a mandatory element in the Brackets message.
R1 V6.1	APP	 Add a new code in the CC@PenaltyDesc for Penalty Shot (P_SHO).



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1. Introduction

1.1. This document

This document includes the ODF Ice Hockey Data Dictionary. This Data Dictionary refines the messages described in the ODF Central Messages Interface Document and ODF Sport Messages Interface Document specifically for Ice Hockey, 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 Ice Hockey Data Dictionary, with the intention that the information message producer and the message consumer can successfully interchange the information as the Ice Hockey 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

- IF International Federation
- IOC International Olympic Committee
- NOC National Olympic Committee
- ODF Olympic Data Feed
- RSC Results System Codes
- IH Ice Hockey
- 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 generators and the final ODF users		



ODF/INT002	IDS-Global Interface Description Document	This document describes the outmost tag of all documents flowing through IDS. Any message being described in this document will have to follow the general definitions of the IDS-Global Interface Description Document. However, some restrictions to the outmost tag (message header) may be done in this specific interface document.
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 Ice Hockey 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 Ice Hockey 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, IDS header and 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 Ice Hockey.

Any ODF Ice 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.

Code Entity	Code Entity Set of Values				
CC @Action	Code	Description			
	GK	Goalkeeper in, at the beginning of the game, or out at he end of the game			
	GOAL	Goal			
	PTY	Penalty			
	PTY_SHOT	Penalty shot			
	GWS	Game winning shoot only for @code GWS			
	GWG	Game winning goal only for @code GWS			
CC @ActionRole	Code	Description			
	ASST_1	Assistant 1 (in goal action, if assistant 1 is awarded)			
	ASST_2	Assistant 2 (in goal action, if 2 assistants are awarded)			
	GK	Goal keeper (in penalty shoot, GWS and GWG actions)			
	GK_IN	Goalkeeper in (in goalkeeper action). Not used for goalkeeper at the beginning of the game action.			
	GK_OUT	Goalkeeper out (in goalkeeper action). Not used for goalkeeper at the end of the game action.			
	SCR	Goal scorer (in goal action)			
	SHOT	Penalty shooter, in penalty shoot, GWS and GWG actions.			
CC @Assignment	Code	Description			
	GK	Line up goalkeeper			
	EG	Emergency Goalkeeper			
	1	Line 1			
	2	Line 2			
	3	Line 3			
	4	Line 4			
CC @BracketItemsCode	Code	Description			
2	CLA	Classification games (just in women's competition)			



	QUAL_POFF	Qualification play-off (just in men's competition)			
	QFL	Quarterfinals (just in men's competition)			
	SFL	Semifinals			
	FNL	Finals			
CC @Function	See entity Function	ommon Codes Document n s attribute to be used is Code			
CC @EntryStatus	Code	Description			
	D	Disqualified			
CC @GoalType	Code	Description			
	ENG	Empty net goal			
	EQ	Equal strength			
	PP1	Power play – 1 player			
	PP2	Power play – 2 players			
	SH1	Short handed - 1 player			
	SH2	Short handed - 2 players			
	PS	Penalty Shot			
CC @Hand	Code	Description			
	L	Left			
	R	Right			
CC @IRM	Code	Description			
	DSQ	Disqualified			
CC @PenaltyDesc	Code	Description			
	ABUSE	Abuse of Official by Players/Team Officials			
	AD-EQ	Measurement of equipment			
	ATTUDE	Captain and Alternate Captain Attitude			
	BD-CK	Women Body-Checking			
	BENCH	Bench Minor Penalty			
	BLOOD	Prevention of Infection by Blood			
	BOARD	Boarding			
	BR-ST	Broken Stick			
	BUT-E	Butt-Ending			
	CHARG	Charging			
	CHE-B	Checking from Behind			
	CHE-H	Checking to the head and neck Area			
	CH-PL	Infringement of Change of Players Procedure			
	CLIPP	Clipping			
	CROSS	Cross-Checking			
	DELAY	Delaying the Game			
	DIS-N	Goal being deliberately upset or knocked			
	ELBOW	ELBOW = Elbowing			
	EQ-INF	EQ-INF=Illegal or Dangerous Equipment			
	LQ-IINF	(Equipment Infraction)			



	EX-RP	EX-RP= Excessive Roughness
	FAL-P	FAL-P= Falling on the Puck by the Player/Goalkeeper
	FISTI	FISTI = Fisticuffs
	GA-MI	GA-MI = Game Misconduct (GM)
	GK-PEN	GK-PEN=Goalkeeper Penalties
	HAND-P	HAND-P=Handling the Puck with the hands By a Player/Goalkeeper
	H-BUT	H-BUT=Head-Butting
	HI-ST	HI-ST = High Sticking
	HOLD	HOLD = Holding
	HOOK	HOOK = Hooking
	HO-ST	HO-ST = Holding the Stick
	INTRF	INTRF = Interference
	INT-S	INT-S=Interference With Spectators
	KICK	KICK=Kicking
	KNEE	KNEE = Kneeing
	L-BCH	L-BCH=Players Leaving the Penalty Bench
	MATCH	MATCH = Match Penalty
	MISC	MISC = Misconduct
	OTHER	OTHER = Other Penalties
	P_SHO	P_SHO = Penalty Shot
	REFUSE	REFUSE=Refusing to Start Play-Team on/off the Ice
	ROUGH	ROUGH = Roughing
	SLASH	SLASH = Slashing
	SPEAR	SPEAR = Spearing
	THR-ST	THR-ST= Throwing a stick or any Object
	TOO-M	TOO-M = Too Many Players on the Ice
	TRIP	TRIP = Tripping
	UN-SP	UN-SP = Diving
CC @PenaltyShot	Code	Description
	SCRD	Scored - For penalty shot during the game and GWS
	MISS	Missed – Only for penalty shot during the game
	MISS_L	Missed (left) - Only for penalty shot for GWS
	MISS_R	Missed (right) - Only for penalty shot for GWS
	MISS_GP	Missed (goal post) - Only for penalty shot for GWS
	MISS_H	Missed (height) - Only for penalty shot for GWS
	LOST_PCK	Lost the puck - Only for penalty shot for GWS



	SVD_GOL	Saved by Goalie - Only for penalty shot for GWS		
CC @Period	Code	Description		
	1	Period 1		
	2	Period 2		
	3	Period 3		
	ОТ	Overtime		
CC @Position	Code	Description		
	F	Forward		
	D	Defence		
	GK	Goalkeeper		
CC @ResultType	Code	Description		
(Both forfeits and score are	RT_FORFEIT	Forfeit for just the team including this code (just in the Event Unit Results message).		
for the event unit results message, while rank and invalid result are for the		Forfeit for the two teams (just in the Event Unit Results message), to indicate the both teams lost.		
standings and event final ranking messages)	RT_SCORE	Competitor's score (just in the Event Unit Results message).		
	RT_RANK	Rank (in the Standings of group in a team competition message and Event final ranking message)		
	RT_INVALID_RESULT	Invalid Result Mark (in the Standings of group in a team competition message and Event final ranking message)		
CC @WLT	Code	Description		
	W	Won		
	L	Lost		
	Т	Tie		
	OTW	Overtime won		
	OTL	Overtime lost		



4. Applicable Messages

The following table is a full list of all ODF messages and describes the list of messages used in Ice Hockey, 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		used in this	Message extended in this document
DT_SCHEDULE	Competition schedule	Central	X	
DT_SCHEDULE_UPDATE	Competition schedule update	Central	X	
DT_ORGANISATIONS	Organisations	Central	Global	
DT_PARTIC_ATHLETES	List of athletes by discipline	Central	Х	Х
DT_PARTIC_ATH_UPDATE	List of athletes by discipline update	Central	Х	Х
DT_PARTIC_OFFICIALS	List of officials	Central	Х	
DT_PARTIC_OFF_UPDATE	List of officials update	Central	X	
DT_PARTIC_TEAMS	List of teams	Central	X	
DT_PARTIC_TEA_UPDATE	List of teams update	Central	X	
DT_PARTIC_HISTORIC	List of historical athletes	Central		
DT_TEAM_HISTORIC	List of historical teams	Central		
DT_PARTIC_HORSES	List of equestrian horses	Central		
DT_MEDALS	Medal standings	Central	Global	
DT_MEDALLISTS_DAY	Medallists of the day	Central	Global	
DT_HISTORIC_RECORD	Historical records	Central		
DT_GLOBAL_GM	Global good morning	Central	Global	
DT_GLOBAL_GN	Global good night	Central	Global	



DT_MEDALLISTS_DISCIPLINE	Medallists by discipline	Sports	Х	
DT_START_LIST	Start List	Sports	Х	Х
DT_RESULT	Event Unit Results	Sports	Х	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	Х	Х
DT_RANKING	Event Final ranking	Sports	Х	Х
DT_STATS	Statistics table	Sports	Х	Х
DT_MEDALLISTS	Medallists of one event	Sports	Х	Х
DT_RECORD	Records	Sports		
DT_COMMUNICATION	Official Communication	Sports	Х	
DT_BRACKETS	Brackets	Sports	Х	X
DT_GM	Discipline/venue good morning	Sports	Х	Х
DT_GN	Discipline/venue good night	Sports	Х	Х
DT_FED_RANKING	Federation Ranking	Sports		
DT_UNITCONFIG	Event Unit Configuration	Sports		



Ice Hockey Data Extension

5.1. 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.

5.1.1. IDS and ODF header

Regarding to the IDS and 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:

IDS Header: RSC

The RSC attribute usually has the DDGEEEPUU format, where DD is the Discipline attribute, G is the Gender attribute, EEE is the Event attribute, P is the Phase attribute and UU is the Unit attribute in the IDS header. The concatenation of these attributes –Discipline, Gender, Event, Phase and Unit-will be implicitly defined when defining the RSC attribute in each case. However, just the RSC attribute will be defined in order to avoid redundant definition.

ODF Header: DocumentCode.

5.1.2. 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.



5.2. List of accredited athletes by discipline/ List of accredited athletes by discipline update

5.2.1. Description

This message is the List of accredited athletes by discipline/update as described in the ODF Central Messages Interface Document.

5.2.2. Header Values

The definition in the ODF Central Messages Interface Document is valid

5.2.3. Trigger and Frequency

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

5.2.4. Message Structure

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

EventEntry

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

5.2.5. Message Values

The following table lists the "List of accredited athletes by discipline" optional attributes (defined in the ODF Sport Messages Interface Document) that are used in the case of Ice Hockey, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
RegisteredEvent	Bib	0	S(2)	Jersey 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 Ice Hockey.

Element: E	Element: EventEntry				
Туре	Code	Value	Description		
E_ENTRY	E_POSITION	CC @Position	For @Type: Send proposed type		
			For @Code: Send proposed code		
			For @Value: Position in the team		
	E_HAND	CC @Hand	For @Type: Send proposed type		



		For @Code: Send proposed code
		For @Value: Hand of the player
E_CLUB_NAME	String	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Club name
E_ENTRY_STATUS	CC @EntryStatus	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Entry status.

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

Type /Code	Description	Expected
E_ENTRY /E_POSITION		Always, as soon as this information is known.
E_ENTRY /E_HAND		Always, as soon as this information is known.
E_ENTRY /E_CLUB_NAME	Club name	Always, as soon as this information is known.

5.2.6. Message sort

Please, follow the general definition.



5.3. Start List

5.3.1. Description

This message is the Start List message as described in the ODF Sport Messages Interface Document. In the case of Ice Hockey, it will present either the game roster or the line-up (please, see the Trigger and Frequency chapter, as well as the Message Values chapter).

5.3.2. Header Values

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

5.3.3. Trigger and Frequency

The message will normally be sent four times:

- As soon as head-to-head (H2H) teams are known, it will be sent as the H2H start list
- Approx. 2 hours before the start of the game, it will be sent as game roster
- Approx. 50 minutes before the start of the game, it will be sent as line-up (with captain / assistant captain information)
- Approx. 20 minutes before the start of the game (with team starters)

Trigger also after any major change

5.3.4. Message Structure

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

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

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

Composition /Athlete should follow the general rules as explained in the ODF Sport Messages Interface Document.

5.3.5. 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 Ice Hockey, as well as the attributes that have an extended definition.



Element	Attribute	M/O	Value	Comments
Officials	Function	М	CC	Send according to the codes, the
/Official			@Function	referees and the linesmen
	Order	M	Numeric	Send by order, referee 1, referee 2 (if applicable), linesmen 1, linesmen 2
Start	StartOrder	M	Numeric	Send 1for home team, send 2 for away team
	SortOrder	М	Numeric	Same @StartOrder
Coach	Function	М	CC @Function	Coach function
	Order	M	Numeric	Send 1 if just one coach, sequential number if more than one
Start	Bib	М	S(2)	Jersey number
/Competitor /Composition /Athlete (Either in game roster or line-up, include all players as in game roster)	Order	M	N(3) 990	In game-roster - Send order according to Start @Bib - Send suspended players at the end In line-up: - Send goalkeepers first (according to their starting order), if they appear in the line-up - Send then rest of positions according to their assignment - Within an assignment, send first defence, and then forwards - For the same assignment and position, order finally by @Bib - Then, the rest of the players sorted according to the roster, and without assignment (the players without assignment should not be considered as part of the line-up).

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

Element: Co	Element: Competitor /EventUnitEntry					
Туре	Code	Value	Description			
EU_ENTRY	E_HOME		For @Type: Send proposed type			
			For @Code: Send proposed code just for the competitor that is thome team			
			For @Value: Do not send anything			
	E_AWAY		For @Type:			



	Send proposed type
	For @Code: Send proposed code just for the competitor that is the away team
	For @Value: Do not send anything

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

Type /Code	Description	Expected
EU_ENTRY /E_HOME		It must be sent in the case of the home team, and not sent for the away team
EU_ENTRY /E_AWAY		It must be sent for the away team, and not sent for the home team

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

Element: Co	ompetitor /Compositi	on /Athlete /E	ventUnitEntry
Туре	Code	Value	Description
EU_ENTRY	E_POSITION	CC @Position	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Position in the team
	E_ASSIGNMENT	CC @Assignment	For @Type: Send proposed type
			For @Code: Send proposed code for non-goalkeeper line or goalkeeper in the line-up
			For @Value: Non-goalkeeper line
	E_SUSPENDED		For @Type: Send proposed type
			For @Code: Send proposed code for suspended players
			For @Value: Do not send anything
	E_STARTING		For @Type: Send proposed type
			For @Code: Send proposed code for the starting players
			For @Value: Do not send anything
	E_CAPTAIN		For @Type: Send proposed type
			For @Code: Send proposed code for the captain
			For @Value:



			Do not send anything
E	E_ASS_CAPTAIN		For @Type: Send proposed type
			For @Code: Send proposed code for the assistant captain
			For @Value: Do not send anything

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

Type /Code	Description	Expected
EU_ENTRY /E_POSITION	Position in the team	Send always
EU_ENTRY /E_ASSIGNMENT	line or goalkeeper	Send this information just in the line- up form of the message, for those players appearing in the line-up
EU_ENTRY /E_SUSPENDED		Send just for those suspended players
EU_ENTRY /E_STARTING		Send the code just for the starting players (when this information is known)
EU_ENTRY /E_CAPTAIN	Captain	Send the code just for the captain (when this information is known)
EU_ENTRY /E_ASS_CAPTAIN	•	Send the code just for the assistant captain (when this information is known)

5.3.6. Message sort

Please, follow the general definition.



5.4. Event Unit Results

5.4.1. Description

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

5.4.2. Header Values

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

5.4.3. Trigger and Frequency

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

- After each period, the message should be sent for intermediate results:
 - o ResultStatus in the headers will have the value "INTERMEDIATE"
 - In this case, the element Result will contain the result at the moment after the period, as it can also be determined in the Period element (the period can be seen in Period @Code).

Then proceed with unofficial and official results, as expected.

Trigger also after any major change.

5.4.4. Message Structure

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

- UnitDateTime (following the general rules for this element, however being @EndDate mandatory following the general rule)
- UnitInfo
- Period
- UnitAction
- UnitAction /ExtendedAction
- UnitAction /Competitor
- UnitAction /Competitor /Composition /Athlete
- Competitor /Stats /Stat (for the teams' statistics)

5.4.5. 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
Result	WLT	0	CC @WLT	Code to indicate whether the team competitor won, lost or tied the game. In the case of Forfeit, the team will be shown as losing the game (it could be both losing, if both teams Forfeit)
	ResultType	M	CC @ResultType	Result type, either Score or Forfeit for the corresponding event unit
	Result	0	Numeric or '*'	Score for the team competitor for the particular game If @ResultType is Forfeit of the two teams, the Result should be '*', to indicate the both teams lost by '5 - 0'. However, if @ResultType is Forfeit for just one of the teams, Result will be numeric, as if it were Score
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the results for the particular event unit. It should be listed, first, the team that won (in case of tie, it should be according to @SortOrder in the start list).

Send UnitDateTime including also the @EndDate attribute.

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

Element: UnitInfo						
Туре	Code	Value	Description			
UI_GENERAL	GE_ATTENDANCE		For @Type: Send proposed type			
			For @Code: Send proposed code			
			For @Value: Number of spectators			

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

Type /Code	Description	Expected
UI_GENERAL /GE_ATTENDANCE	Number of spectators	Send just if this information is available

Element	Attribute	M/O	Value	Comments
Period	Code	M	Numeric Or GWS	Numeric, beginning from 1, to indicate the period (key of Period element), or GWS for game winning shot or OT for Overtime
			Or OT	



Element	Attribute	M/O	Value	Comments
	HomeScore	М	Numeric	Home competitor score up to the end of the @Code period
	AwayScore	М	Numeric	Away competitor score up to the end of the @Code period
	HomePeriodScore	М	Numeric	Home competitor score achieved in the @Code period (as isolated period)
	AwayPeriodScore	М	Numeric	Away competitor score achieved in the @Code period (as isolated period)

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

Eleme	Element: UnitAction						
Туре	Code	Pos	Value	Description			
	CC @Period or GWS	Numeric		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
AC_IH /CO	Actions in the game	Send always that the information is available
@Period or GWS		

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

Eleme	Element: ExtendedAction				
Туре	Code	Value	Description		
EA_IH	IH_TIME	MM:SS 00:00	For @Type: Send proposed type		
			For @Code: Send proposed code for time when the action happened		
			For @Value: Time when the action takes place. First period starts at "00:00", second period at "20:00", third period at "40:00", and OT (if necessary) at "60:00". If Period GWS is after a 5-minute overtime, time will be "65:00", if it is after a 10-minute overtime, "70:00", if it is after a 20-minute overtime, "80:00".		
	IH_ET	MM:SS 00:00	For @Type: Send proposed type		
			For @Code: Send proposed code for penalty end time		
			For @Value: Penalty end time. First period starts at "00:00", second period at "20:00", third period at "40:00", and OT (if necessary) at 60:00		



IH	H_RES	S(7) 000:000	For @Type: Send proposed type
			For @Code: Send proposed code for result of game after action
			For @Value: Result of game after action, first home team, then away team
II	H_PTY_TYPE	Numeric	For @Type: Send proposed type
			For @Code: Send proposed code for penalty type
			For @Value: Penalty minutes (e.g.: "2")
II	H_PTY_DESC	CC @PenaltyDesc	For @Type: Send proposed type
			For @Code: Send proposed code for penalty description
			For @Value: Select one of CC @PenaltyDesc
II	H_PTY_SHOT_DESC	CC @PenaltyShot	For @Type: Send proposed type
		·	For @Code: Send proposed code
			For @Value select one of CC @PenaltyShot
II	H_GOAL_TYPE	CC @GoalType	For @Type: Send proposed type
			For @Code: Send proposed code for type of goal
			For @Value: Select one of CC @GoalType

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

Type /Code	Description	Expected
EA_IH /IH_TIME	Time when the action takes place	Send always except for UnitAction @Code = GWS
EA_IH /IH_ET	Penalty end time	Send always for UnitAction @Code = IH_PTY
EA_IH /IH_RES	Result of game after action	Send always for UnitActions when there is a change in the score
EA_IH /IH_PTY_TYPE	Penalty type	Send always for UnitAction @Code = IH_PTY
EA_IH /IH_PTY_DESC	Penalty description	Send always for UnitAction @Code = IH_PTY
EA_IH /IH_PTY_SHOT_DESC	Penalty shot description	Send always for UnitAction @Code = IH_PTY_SHOT and IH_GWS
EA_IH /IH_GOAL_TYPE	Type of goal	Send always for UnitAction @Code = IH_GOAL and IH_PTY_SHOT

UnitAction /Competitor should be used for all actions according to the general definition of this element.

UnitAction /Competitor /Composition /Athlete should also follow the general definition of this element for all actions. However, the following table redefined the optional @Role attribute, specifically for Ice Hockey.



Element	Attribute	M/O	Value	Comments
UnitAction	Role	0	CC	Role of the player in the action, according
/Competitor			@ActionRole	to the available codes. It is specified in the
/Composition				codes sections which roles should be
/Athlete				used for which actions.

The following table describes in more detail the Competitor /Stats /Stat element in the case of ice hockey for the team statistics.

	Element: Competitor /Stats /Stat (for the teams)					
Туре	Code	Pos	Value	Description		
ST_IH	IH_SOG	Numeric Or	Numeric	For @Type: Send proposed type		
		ТОТ		For @Code: Send proposed type		
				For @Pos: Period (numeric) or TOT (for total)		
				For @Value: Shots on goal for one particular @Pos Period, or total		
	IH_SVS	Numeric Or	Numeric	For @Type: Send proposed type		
		ТОТ		For @Code: Send proposed type		
				For @Pos: Period (numeric) or TOT (for total)		
				For @Value: Saves for one particular @Pos Period, or total		
	IH_PIM	Numeric Or TOT	Numeric	For @Type: Send proposed type		
				For @Code: Send proposed type		
				For @Pos: Period (numeric) or TOT (for total)		
				For @Value: Penalties in minutes for one particular @Pos Period, or total		
	IH_TPP	Numeric Or TOT	MM:SS 90:00	For @Type: Send proposed type		
				For @Code: Send proposed type		
				For @Pos: Period (numeric) or TOT (for total)		
				For @Value: Time of power play in minutes and seconds for one particular @Pos Period, or total		
				MM=minutes, SS=seconds		

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

Type /Code	Description	Expected
ST_IH /IH_SOG	Shots on goal, for one particular @Pos Period, or total	Always
ST_IH /IH_SVS	Saves for one particular @Pos Period, or total	Always



ST_IH /IH_PIM	Penalties in minutes for one particular @Pos Period, or total	Always
	Time of power play in minutes and seconds for one particular @Pos Period, or total	Always

5.4.6. Message sort

Please, follow the general definition.



5.5. Statistics

5.5.1. Description

This message is the Statistics message as described in the ODF Sport Messages Interface Document. It presents the cumulative statistics.

5.5.2. Header Values

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

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

• IND: For individual statistics. There will be one single report <u>with the statistics</u> of all the players of all the teams.

This report includes the following statistics for each of the players being listed:

- Score: For individual score statistics.
- Net: For individual statistics on net result of positive and negative participation
- Pen: For individual statistics on penalized players
- Goalkeepers: For individual statistics on goalkeepers
- Face-offs: For individual statistics on face-offs
- IND_BEST: For individual statistics on best players selected by the directorate (in this case, send just the best players as being requested, after the Gold Medal game).
- TEAM_SE: For team scoring efficiency statistics
- TEAM_PP: For team power play statistics
- TEAM_PK: For team penalty killing statistics
- TEAM_GK: For team goalkeeping statistics
- TEAM_PTY: For team penalties statistics
- TEAM_SH: For team shorthanded goals
- TEAM_ATT: For team attendance

5.5.3. Trigger and Frequency

This message should be sent after the end of each of the games / event units are official.

The order of the messages should be:



- First team statistics, in the following order: TEAM_SE, TEAM_PP, TEAM_PK, TEAM_GK, TEAM_PTY, TEAM_SH, TEAM_ATT.
- Then individual statistics, in the following order: IND, IND_BEST (if this IND_BEST is known).

Trigger also after any major change.

5.5.4. Message Structure

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

- Competitor /StatsItems /StatsItem (for team statistics: TEAM_SE, TEAM_PP, TEAM_PK, TEAM_GK, TEAM_PTY, TEAM_SH, TEAM_ATT)
- Competitor /Composition /Athlete /StatsItems /StatsItem (for individual player statistics: IND and IND_BEST)

5.5.5. Message Values

The following table lists the Statistics 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
Competitor	Code	M	S(20) with no leading zeroes	Team competitor's ID
	Туре	M	Т	T is for team competitor in the case of TEAM_stat, IND (or IND_BEST) statistics



Element	Attribute	M/O	Value	Comments
	Order	M	Numeric	The order will be according to the Competitor/StatsItems/StatsItem IH_RNK_* for all the team statistics messages (those which DocumentSubtype begin by TEAM_: - IH_RNK_SE for the TEAM_SE statistics - IH_RNK_PP for the TEAM_PP statistics - IH_RNK_PK for the TEAM_PK statistics - IH_RNK_GK for the TEAM_GK statistics - IH_RNK_PTY for the TEAM_PTY statistics - IH_RNK_SH for the TEAM_SH statistics - IH_RNK_SPEC for the TEAM_ATT statistics) However, disqualified teams will appear at the bottom of the report.
				The order will be according to the Competitor/Composition /Athlete /StatsItems /StatsItem IH_SORT_SCORE for all the individual statistics messages (those which DocumentSubtype is IND). Several statistics reports are included in this IND message, and for this reason, the sort of each type statistic could be sorted by each of these codes: IH_SORT_SCORE, IH_SORT_NET, IH_SORT_PEN, IH_SORT_GK, IH_SORT_FO. However, disqualified players will not appear at the bottom of the report.

The element Competitor /Composition /Athlete will be included for all TEAM_* or IND_* statistics messages following the general message rules. However, the following considerations should be taken into account:

- In the case of TEAM_* statistics, the whole team roster will be included for the team
- In the case of IND_* statistics, there will be just one player (the one receiving the statistic) for each Competitor element. If there are two players of the same team appearing in a successive order in one IND_* statistics message, they will be appearing in two different Competitor elements in any case.

Element	Attribute	M/O	Value	Comments
Competitor	Code	М	S(20) with	Athlete's ID
/Composition			no leading	
/Athlete			zeroes	
	Order	M	Numeric	The order will be according to the team roster in the case Competitor @Type=T
				The Order attribute will be 1 in the case Competitor @Type=A

The following table describes in more detail the Competitor /StatsItems /StatsItem element in the case of Ice Hockey (to be sent just in the case of team statistics:



TEAM_SE, TEAM_PP, TEAM_PK, TEAM_GK, TEAM_PTY, TEAM_SH and TEAM_ATT).

Elemei	nt: Competitor	/StatsItems	/StatsItem
Туре	Code	Value	Description
ST_IH	IH_GP	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for number of games played
			For @Value: Games played indeed by the team competitor
	IH_DSQ		For @Type: Send proposed type
			For @Code: Send proposed code for those disqualified teams
			For @Value: Do not send anything
	IH_GF	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for number of goals for
			For @Value: Number of goals for
	IH_SSG	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for shots saved by goalkeeper
			For @Value: Shots saved by goalkeeper
	IH_SOG	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for shots on goal
			For @Value: Shots on goal
	IH_SGP	N(2).N(2) 90.00	For @Type: Send proposed type
			For @Code: Send proposed code for percent of goals from total shots
			For @Value: Percent of goals from total shots
	IH_RNK_SE	990 Send proposed type For @Code:	Send proposed type
			Send proposed code for scoring efficiency rank (ranked by highest
			For @Value: Scoring efficiency rank
	IH_SORT_SE	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Sort according to IH_RNK_SE (used also to sort rank ties)
	IH_ADV	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for advantage (times on power play)



		For @Value: Advantage (times on power play)
IH_PPGF	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for power play goals for
		For @Value: Power play goals for
IH_PPP	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code: Send proposed code for power play eff. as percentage
		For @Value: Power play eff. as percentage
IH_TPP	MM:SS 90:00	For @Type: Send proposed type
		For @Code: Send proposed code for time of power play
		For @Value: Time of power play
IH_PPA	MM:SS 90:00	For @Type: Send proposed type
		For @Code: Send proposed code for average power play time in minutes and second
		For @Value: Average power play time in minutes and seconds
IH_RNK_PP	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for power play rank (based on highest IH_PP highest IH_GP)
		For @Value: Power play rank
IH_SORT_PP	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_PP (used also to sort rank ties)
IH_DVG	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for disadvantage (number of times shorthanded)
		For @Value: Disadvantage (number of times shorthanded)
IH_PPGA	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for power play goals against
		For @Value: Power play goals against
IH_PKP	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code: Send proposed code for penalty killing percentage
		For @Value: Penalty killing percentage
IH_TSH	N(2):N(2)	For @Type:



	90:00	Send proposed type
		For @Code: Send proposed code for time shorthanded in min. and sec.
		For @Value: Time shorthanded in min, and sec.
IH_TSA	N(2):N(2) 90:00	For @Type: Send proposed type
		For @Code: Send proposed code for average time shorthanded in minutes and seconds
		For @Value: Average time shorthanded in minutes and seconds
IH_RNK_PK	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for penalty killing rank (based on highest IH_PKP highest IH_GP)
		For @Value: Penalty killing rank
IH_SORT_PK	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_PK (used also to sort rank ties)
IH_GA	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for goals against
		For @Value: Goals against
IH_SVS	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for saves
		For @Value: Saves
IH_SOGG	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for shots on goal (against goalkeeper)
		For @Value: Shots on goal (against goalkeeper)
IH_SVP	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code: Send proposed code for percentage of saves of total SOG
		For @Value: Percentage of saves of total SOG
IH_GAA	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code: Send proposed code for goals against as average per 60 minutes
		For @Value: Goals against as average per 60 minutes
IH_SHGA	N(3) 990	For @Type: Send proposed type
		For @Code:



		Send proposed code for shorthanded goals against
		For @Value: Shorthanded goals against
IH_PPGA	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for power play goals against
		For @Value: Power play goals against
IH_SO	N(3)	For @Type:
	990	Send proposed type For @Code:
		Send proposed code for number of shutouts For @Value:
	11(0)	Number of shutouts
IH_ENG	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for empty net goals
		For @Value: Empty net goals
IH_RNK_GK	N(3) 990	For @Type: Send proposed type
	990	For @Code:
		Send proposed code for goalkeeping rank (based on highest IH_SVF For @Value:
III CODT CK	N/O)	Goalkeeping rank
IH_SORT_GK	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_GK (used also to sort rank ties)
IH_M2	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of 2 minutes penalties
		For @Value:
IH_M5	N(3)	Number of 2 minutes penalties For @Type:
	990	Send proposed type For @Code:
		Send proposed code for number of 5 minutes penalties For @Value:
H I M40	N/O)	Number of 5 minutes penalties
IH_M10	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of 10 minutes penalties
		For @Value: Number of 10 minutes penalties
IH_GM	N(3) 990	For @Type: Send proposed type
		For @Code:
		Send proposed code for number of game/gross misconducts For @Value:
IH_MP	N(3)	Number of game misconducts, gross misconducts For @Type:
l	11(0)	1. 0. 0. 190.



	990	Send proposed type
		For @Code: Send proposed code for number of match penalties
		For @Value: Number of match penalties
IH_PIM	N(3)	For @Type:
	990	Send proposed type For @Code:
		Send proposed code for penalties in minutes For @Value:
		Penalties in minutes
IH_PAVG	N(3).N(2) 990.00	For @Type: Send proposed type
		For @Code: Send proposed code for PIM (average) per game
		For @Value: PIM (average) per game
IH_RNK_PTY	N(3)	For @Type:
	990	Send proposed type For @Code:
		Send proposed code for penalties rank (based on highest IH_PIM)
		For @Value: Penalties rank
IH_SORT_PTY	N(3) 990	For @Type: Send proposed type
		For @Code:
		Send proposed code For @Value:
IH_SHGF	N(3)	Sort according to IH_RNK_PTY (used also to sort rank ties) For @Type:
111_01101	990	Send proposed type
		For @Code: Send proposed code for shorthanded goals for
		For @Value: Shorthanded goals for
IH_SHGA	N(3) 990	For @Type: Send proposed type
	330	For @Code:
		Send proposed code for shorthanded goals against For @Value:
	<u> </u>	Shorthanded goals against
IH_SH_NET	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for SHGF - SHGA
		For @Value: SHGF – SHGA
IH_RNK_SH	N(3)	For @Type:
	990	Send proposed type For @Code:
		Send proposed code for shorthanded rank (based on high IH_SH_NET, lowest IH_GP)
		For @Value: Shorthanded rank
IH_SORT_SH	N(3)	For @Type:
	990	Send proposed type For @Code:
		Send proposed code



			For @Value: Sort according to IH_RNK_SH (used also to sort rank ties)
IH_S	IH_SPEC N(6) 999990		For @Type: Send proposed type
			For @Code: Send proposed code for total number of spectators
			For @Value: Total number of spectators
IH_S	SORT_SPEC	N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code
			For @Value: Sort according to IH_RNK_SPEC (used also to sort rank ties)
IH_S		N(6) 999990	For @Type: Send proposed type
			For @Code: Send proposed code for average number of spectators
			For @Value: Average number of spectators
IH_R		N(3) 990	For @Type: Send proposed type
			For @Code: Send proposed code for spectators rank (based on IH_SPEC_AVG)
			For @Value: Spectators rank

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

Type /Code	Description	Expected
ST_IH /IH_GP	Games played indeed by the team competitor	Send always in the case of TEAM_SE, TEAM_PP, TEAM_PK, TEAM_GK, TEAM_PTY, TEAM_SH, TEAM_ATT statistics
ST_IH /IH_DSQ	Disqualified team	Send only for those disqualified teams, in the case of TEAM_SE, TEAM_PP, TEAM_PK, TEAM_GK, TEAM_PTY, TEAM_SH, TEAM_ATT statistics
ST_IH /IH_GF	Number of goals for	Send always in the case of TEAM_SE statistics
ST_IH /IH_SSG	Shots saved by goalkeeper	Send always in the case of TEAM_SE statistics
ST_IH /IH_SOG	Shots on goal	Send always in the case of TEAM_SE statistics
ST_IH /IH_SGP	Percent of goals from total shots	Send always in the case of TEAM_SE statistics
ST_IH /IH_RNK_SE	Scoring efficiency rank	Send always in the case of TEAM_SE statistics
ST_IH /IH_SORT_SE	Sort according to ST_IH /IH_RNK_SE (used also to sort rank ties)	Send always in the case of TEAM_SE statistics
ST_IH /IH_ADV	Advantage (times on power play)	Send always in the case of TEAM_PP statistics
ST_IH /IH_PPGF	Power play goals for	Send always in the case of TEAM_PP statistics
ST_IH /IH_PPP	Power play eff. as percentage	Send always in the case of TEAM_PP statistics
ST_IH /IH_TPP	Time of power play	Send always in the case of TEAM_PP statistics
ST_IH /IH_PPA	Average power play time in minutes and seconds	Send always in the case of TEAM_PP statistics
ST_IH /IH_RNK_PP	Power play rank	Send always in the case of TEAM_PP statistics



ST_IH /IH_SORT_PP	Sort according to ST_IH /IH_RNK_PP (used also to sort rank ties)	Send always in the case of TEAM_PP statistics
ST_IH /IH_DVG	Disadvantage (number of times shorthanded)	Send always in the case of TEAM_PK statistics
ST_IH /IH_PPGA	Power play goals against	Send always in the case of TEAM_PK statistics
ST_IH /IH_PKP	Penalty killing percentage	Send always in the case of TEAM_PK statistics
ST_IH /IH_TSH	Time shorthanded in min. and sec.	Send always in the case of TEAM_PK statistics
ST_IH /IH_TSA	Average time shorthanded in minutes and seconds	Send always in the case of TEAM_PK statistics
ST_IH /IH_RNK_PK	Penalty killing rank	Send always in the case of TEAM_PK statistics
ST_IH /IH_SORT_PK	Sort according to ST_IH /IH_RNK_PK (used also to sort rank ties)	Send always in the case of TEAM_PK statistics
ST_IH /IH_GA	Goals against	Send always in the case of TEAM_GK statistics
ST_IH /IH_SVS	Saves	Send always in the case of TEAM_GK statistics
ST_IH /IH_SOGG	Shots on goal (against goalkeeper)	Send always in the case of TEAM_GK statistics
ST_IH /IH_SVP	Percentage of saves of total SOG	Send always in the case of TEAM_GK statistics
ST_IH /IH_GAA	Goals against as average per 60 minutes	Send always in the case of TEAM_GK statistics
ST_IH /IH_SHGA	Shorthanded goals against	Send always in the case of TEAM_GK statistics
ST_IH /IH_PPGA	Power play goals against	Send always in the case of TEAM_GK statistics
ST_IH /IH_SO	Number of shutouts	Send always in the case of TEAM_GK statistics
ST_IH /IH_ENG	Empty net goals	Send always in the case of TEAM_GK statistics
ST_IH /IH_RNK_GK	Goalkeeping rank	Send always in the case of TEAM_GK statistics
ST_IH /IH_SORT_GK	Sort according to ST_IH /IH_RNK_GK (used also to sort rank ties)	Send always in the case of TEAM_GK statistics
ST_IH /IH_M2	Number of 2 minutes penalties	Send always in the case of TEAM_PTY statistics
ST_IH /IH_M5	Number of 5 minutes penalties	Send always in the case of TEAM_PTY statistics
ST_IH /IH_M10	Number of 10 minutes penalties	Send always in the case of TEAM_PTY statistics
ST_IH /IH_GM	Number of game/gross misconducts	Send always in the case of TEAM_PTY statistics
ST_IH /IH_MP	Number of match penalties	Send always in the case of TEAM_PTY statistics
ST_IH /IH_PIM	Penalties in minutes	Send always in the case of TEAM_PTY statistics
ST_IH /IH_PAVG	PIM (average) per game	Send always in the case of TEAM_PTY statistics
ST_IH /IH_RNK_PTY	Penalties rank	Send always in the case of TEAM_PTY statistics
ST_IH /IH_SORT_PTY	Sort according to ST_IH /IH_RNK_PTY (used also to sort rank ties)	Send always in the case of TEAM_PTY statistics
ST_IH /IH_SHGF	Shorthanded goals for	Send always in the case of TEAM_SH statistics
ST_IH /IH_SHGA	Shorthanded goals against	Send always in the case of TEAM_SH statistics
ST_IH /IH_SH_NET	SHGF – SHGA	Send always in the case of TEAM_SH statistics
ST_IH /IH_RNK_SH	Shorthanded rank	Send always in the case of TEAM_SH statistics
ST_IH /IH_SORT_SH	Sort according to ST_IH /IH_RNK_SH (used also to sort rank ties)	Send always in the case of TEAM_SH statistics



ST_IH /IH_SPEC	Total number of spectators	Send always in the case of TEAM_ATT statistics
ST_IH /IH_SPEC_AVG	Average number of spectators	Send always in the case of TEAM_ATT statistics
ST_IH /IH_RNK_SPEC	Spectators rank	Send always in the case of TEAM_ATT statistics
/IH_SORT_SPEC	Sort according to ST_IH /IH_RNK_SPEC (used also to sort rank ties)	Send always in the case of TEAM_ATT statistics

The following table describes in more detail the Competitor /Composition /Athlete /StatsItems /StatsItem element in the case of Ice Hockey (to be sent just in the case of individual statistics: IND_SCORE, IND_NET, IND_PEN, IND_GK, IND_FO, IND_BEST)

	Value	Description
IH_GP	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of games played
		For @Value: Games played indeed
IH_PTS	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for points
		For @Value: Points
IH_A	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for assists
	1115	For @ Value: Assists
IH_GOL	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for goals scored
	()) ()	For @Value: Goals scored
IH_NET	(-)N(3) (-)990	For @Type: Send proposed type
		For @Code: Send proposed code for net result of positive and negative participation
		For @Value: Net result of positive and negative participation (with "-" sign for negative participation)
IH_PIM	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for penalties in minutes
		For @Value: Penalties in minutes
IH_SOG	N(3) 990	For @Type: Send proposed type For @Code:
	IH_GOL IH_NET	IH_A N(3) 990 IH_GOL N(3) 990 IH_NET (-)N(3) (-)990 IH_PIM N(3) 990 IH_SOG N(3)



For @Value: Total shots	
IH_SP N(2).N(2) For @Type: Send proposed type	
Send proposed type For @Code: Send proposed code for percentage of goals from total For @Value: Percentage of goals from total shots	
For @Code: Send proposed code for percentage of goals from total For @Value: Percentage of goals from total shots IH_RNK_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest number played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort in the lowest number proposed type For @Code: Send proposed code For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rank points, then lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Code: Send proposed type For @Code: Send proposed code	
For @Value: Percentage of goals from total shots IH_RNK_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest number played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of a code in the lowest number played) For @Code: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rank points) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed code for goal scoring leaders rank (rank points) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed code	
Percentage of goals from total shots IH_RNK_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest number played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed code For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of the sort of the lowest number played) IH_RNK_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rank points) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed code for goal scoring leaders rank (rank points) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Code: Send proposed type For @Code: Send proposed code	shots
IH_RNK_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest numbe Played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort according to IH_RNK_SCORE (u	
Send proposed type For @Code: Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest numbe Played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of the send proposed type) For @Code: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rank points) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed type 990 For @Code: Send proposed type 990 For @Code: Send proposed type	
Send proposed code for scoring leaders rank (rank points, then by highest goals, then lowest number Played) For @Value:	
points, then by highest goals, then lowest number Played) For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort according to IH_RNK_SCORE) 990 For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Code: Send proposed type For @Type: Send proposed type Send proposed type Send proposed type	
For @Value: Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort) IH_RNK_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Code: Send proposed type For @Type: Send proposed type For @Type: Send proposed type 990 For @Code: Send proposed code	
Scoring leaders rank IH_SORT_SCORE N(3) 990 For @Type: Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of the send proposed type) For @Code: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type For @Code: Send proposed type For @Code: Send proposed type For @Type: Send proposed type 990 For @Code: Send proposed code	
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Send proposed type For @Code: Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of a	
Send proposed code For @Value: Sort according to IH_RNK_SCORE (used also to sort of according to IH_RNK_SCORE) IH_RNK_GOAL N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
For @Value: Sort according to IH_RNK_SCORE (used also to sort according to IH_RNK_SCORE) IH_RNK_GOAL N(3) 990 For @Type: Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
Sort according to IH_RNK_SCORE (used also to sort of the sort of t	
IH_RNK_GOAL N(3) 990 Send proposed type For @Code: Send proposed code for goal scoring leaders rank (ra then lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
Send proposed type For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	ank ties)
For @Code: Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
Send proposed code for goal scoring leaders rank (rathen lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
then lowest number of Games Played) For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
For @Value: Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	nk by goals
Goal scoring leaders rank IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
IH_SORT_GOAL N(3) For @Type: Send proposed type 990 For @Code: Send proposed code	
Send proposed type 990 For @Code: Send proposed code	
990 For @Code: Send proposed code	
Send proposed code	
- O	
For @Value:	
Sort according to IH_RNK_GOAL (used also to sort ra	nk ties)
IH_RNK_A N(3) For @Type:	
990 Send proposed type	
For @Code:	
Send proposed code for assists rank (rank by assists,	then lowest
number of Games Played)	
For @ Value:	
Assists rank	
IH_SORT_A N(3) For @Type:	
990 Send proposed type	
For @Code: Send proposed code	
For @Value:	
Sort according to IH_RNK_A (used also to sort rank tie	25)
IH_RNK_D_SCORE N(3) For @Type:	.3)
Send proposed type	
For @Code:	
Send proposed code for defensemen scoring leaders r	ank (rank by
highest points, then by highest goals, then by low	
played)	•
For @Value:	
Defensemen Scoring leaders rank	
IH_SORT_D_SCORE N(3) For @Type:	



	990	Send proposed type
		For @Code:
		Send proposed code
		For @Value: Sort according to IH_SORT_D_SCORE (used also to sort rank ties)
IH_POS	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for positive participation
		For @Value: Positive participation
IH_NEG	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for negative participation
		For @Value: Negative participation
IH_RNK_NET	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for net result of positive and negative participation rank (based on highest IH_NET, highest IH_POS and lowest IH_NEG).
		For @Value: Net result of positive and negative participation rank
IH_SORT_NET	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_NET (used also to sort rank ties)
IH_M2	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of 2 minutes penalties
		For @Value: Number of 2 minutes penalties
IH_M5	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of 5 minutes penalties
		For @Value: Number of 5 minutes penalties
IH_M10	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of 10 minutes penalties
		For @Value: Number of 10 minutes penalties
IH_GM	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of game/gross misconducts
		For @Value: Number of game misconducts, gross misconducts
IH_MP	N(3) 990	For @Type: Send proposed type
1	1	- L - L AI -



		For @Code: Send proposed code for number of match penalties
		For @Value: Number of match penalties
IH_PAVG	N(3).N(2) 990.00	For @Type: Send proposed type
		For @Code: Send proposed code for PIM (average) per game
		For @Value: PIM (average) per game
IH_RNK_PEN	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for most penalised players rank (based highest IH_PIM first, lowest IH_GP).
		For @Value: Most penalised players rank
IH_SORT_PEN	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_PEN (used also to sort rank ties)
IH_GKD	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of times goalkeeper dressed
		For @Value: Number of times goalkeeper dressed
IH_MI	MM:SS 00:00	For @Type: Send proposed type
		For @Code: Send proposed code for total minutes in play
		For @Value: Total minutes in play, where MM is minutes and SS is seconds
IH_MIP	MM:SS 00:00	For @Type: Send proposed type
		For @Code: Send proposed code for average minutes in play
		For @Value: Average minutes in play, where MM is minutes and SS is second
IH_SOGG	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for shots on goal (against goalkeeper)
		For @Value: Shots on goal (against goalkeeper)
IH_GA	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of goals against
		For @Value: Number of goals against
IH_SVS	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for number of saves
		For @Value:



		Number of saves
IH_SVP	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code:
		Send proposed code for percentage of saves from shots on goal
		For @Value:
		Percentage of saves from shots on goal
IH_SO	N(3)	For @Type:
	990	Send proposed type
		For @Code: Send proposed code for number of shutouts
		For @Value:
	NI(O) NI(O)	Number of shutouts
IH_GAA	N(2).N(2) 90.00	For @Type: Send proposed type
	30.00	For @Code:
		Send proposed code for goals against as average per 60 minutes
		For @Value:
		Goals against as average per 60 minutes
IH_PPGA	N(3)	For @Type:
	990	Send proposed type
		For @Code:
		Send proposed code for power play goals against
		For @Value: Power play goals against
IH_SHGA	N(3)	For @Type:
III_SIIGA	990	Send proposed type
		For @Code:
		Send proposed code for shorthand goals against
		For @Value: Shorthand goals against
IH_RNK_GK	N(3)	For @Type:
	990	Send proposed type
		For @Code: Send proposed code for goalkeeper rank (based on highest
		IH_SVP, lowest IH_GAA, and highest IH_GPI). Highest ranks
		should be for those goalkeepers with at least 40% of their team's
		total minutes
		For @Value:
III COST C'	N/O)	Most penalised players rank
IH_SORT_GK	N(3) 990	For @Type: Send proposed type
	330	For @Code:
		Send proposed code
		For @Value:
		Sort according to IH_RNK_GK (used also to sort rank ties)
IH_FO_WON	N(3)	For @Type:
	990	Send proposed type
		For @Code:
		Send proposed code for face-offs won
		For @Value: Face-offs won
IH_FO_LOST	N(3)	For @Type:
IH_FO_LOST	N(3) 990	Send proposed type
IH_FO_LOST		Send proposed type For @Code:
IH_FO_LOST		Send proposed type



IH_FO_NET	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for face-offs net
		For @Value: Face-offs net
IH_FOP	N(2).N(2) 90.00	For @Type: Send proposed type
		For @Code: Send proposed code for face-offs won as percentage
		For @Value: Face-offs won as percentage
IH_RNK_FO	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code for FO rank (based on highest IH_FOP)
		For @Value: FO rank
IH_SORT_FO	N(3) 990	For @Type: Send proposed type
		For @Code: Send proposed code
		For @Value: Sort according to IH_RNK_FO (used also to sort rank ties)
IH_BEST_FW		For @Type: Send proposed type
		For @Code: Send proposed code for best forward
		For @Value: Do not send anything
IH_BEST_D		For @Type: Send proposed type
		For @Code: Send proposed code for best defenseman
		For @Value: Do not send anything
IH_BEST_GK		For @Type: Send proposed type
		For @Code: Send proposed code for best goalkeeper
		For @Value: Do not send anything
IH_MVP		For @Type: Send proposed type
		For @Code: Send proposed code for most valuable player
		For @Value: Do not send anything

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

Type /Code	Description	Expected
ST_IH /IH_GP	Games played indeed	Send always in the case of IND statistics
ST_IH /IH_PTS	Points	Send always in the case of IND statistics
ST_IH /IH_A	Assists	Send always in the case of IND statistics
ST_IH /IH_GOL	Goals scored	Send always in the case of IND statistics



	T	
ST_IH /IH_NET	Net result of positive and negative participation	Send always in the case of IND statistics
ST_IH /IH_PIM	Penalties in minutes	Send always in the case of IND statistics
ST_IH /IH_SOG	Shots on goal	Send always in the case of IND statistics
ST_IH /IH_SP	Percentage of goals from total shots	Send always in the case of IND statistics
ST_IH /IH_RNK_SCORE	Scoring leader rank	Send always in the case of IND statistics
ST_IH /IH_SORT_SCORE	Sort according to ST_IH /IH_RNK_SCORE	Send always in the case of IND statistics
ST_IH /IH_RNK_GOAL	Goal scoring leader rank	Send always in the case of IND statistics
ST_IH /IH_SORT_GOAL	Sort according to ST_IH /IH_RNK_GOAL	Send always in the case of IND statistics
ST_IH /IH_RNK_A	Assists rank	Send always in the case of IND statistics
ST_IH /IH_SORT_A	/IH_RNK_A	Send always in the case of IND statistics
ST_IH /IH_RNK_D_SCORE	Defensemen scoring leaders rank	Send always in the case of IND statistics
ST_IH /IH_SORT_D_SCORE		Send always in the case of IND statistics
ST_IH /IH_POS	Positive participation	Send always in the case of IND statistics
ST_IH /IH_NEG	Negative participation	Send always in the case of IND statistics
ST_IH /IH_RNK_NET	Net result of positive and negative participation rank	Send always in the case of IND statistics
ST_IH /IH_SORT_NET	Sort according to ST_IH /IH_RNK_NET	Send always in the case of IND statistics
ST_IH /IH_M2	Number of 2 minutes penalties	Send always in the case of IND statistics
ST_IH /IH_M5	Number of 5 minutes penalties	Send always in the case of IND statistics
ST_IH /IH_M10	Number of 10 minutes penalties	Send always in the case of IND statistics
ST_IH /IH_GM	Number of game/gross misconducts	Send always in the case of IND statistics
ST_IH /IH_MP	Number of match penalties	Send always in the case of IND statistics
ST_IH /IH_PAVG	PIM (average) per game	Send always in the case of IND statistics
ST_IH /IH_RNK_PEN	Most penalised players rank	Send always in the case of IND statistics
ST_IH /IH_SORT_PEN	Sort according to ST_IH /IH_RNK_PEN	Send always in the case of IND statistics
ST_IH /IH_GKD	Number of times goalkeeper dressed	Send always in the case of IND statistics
ST_IH /IH_MI	Total minutes in play	Send always in the case of IND statistics
ST_IH /IH_MIP	Average minutes in play	Send always in the case of IND statistics
ST_IH /IH_SOGG	Shots on goal against goalkeeper	Send always in the case of IND statistics
ST_IH /IH_GA	Goals against	Send always in the case of IND statistics
ST_IH /IH_SVS	Number of saves	Send always in the case of IND statistics
ST_IH /IH_SVP	Percentage of saves from shots on goal	Send always in the case of IND statistics
ST_IH /IH_SO	Number of shutouts	Send always in the case of IND statistics



ST_IH /IH_GAA	Goals against as average per 60 minutes	Send always in the case of IND statistics
ST_IH /IH_PPGA	Power play goals against	Send always in the case of IND statistics
ST_IH /IH_SHGA	Shorthanded goals against	Send always in the case of IND statistics
ST_IH /IH_RNK_GK	Goalkeeper rank	Send always in the case of IND statistics
ST_IH /IH_SORT_GK	Sort according to ST_IH /IH_RNK_GK	Send always in the case of IND statistics
ST_IH /IH_FO_WON	Face-offs won	Send always in the case of IND message
ST_IH /IH_FO_LOST	Face-offs lost	Send always in the case of IND message
ST_IH /IH_FO_NET	Face-offs net	Send always in the case of IND message
ST_IH /IH_FOP	Face-offs won as percentage	Send always in the case of IND message
ST_IH /IH_RNK_FO	FO rank	Send always in the case of IND message
ST_IH /IH_SORT_FO	Sort according to ST_IH /IH_RNK_FO	Send always in the case of IND statistics
ST_IH /IH_BEST_FW	Best forward	Send always in the case of IND_BEST message
ST_IH /IH_BEST_D	Best defenseman	Send always in the case of IND_BEST message
ST_IH /IH_BEST_GK	Best goalkeeper	Send always in the case of IND_BEST message
ST_IH /IH_MVP	Most valuable player	Send always in the case of IND_BEST message

5.5.6. Message sort

Please, order following the @Order attributes.



5.6. Pool Standings of group in a team competition

5.6.1. Description

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

This message shows the pool standings for the current phase.

5.6.2. Header Values

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

DocumentSubtype and Subtype attributes will be:

- Preliminary round group A: A
- Preliminary round group B: B
- Preliminary round group C: C (only men's event)
- Whole preliminary round: 9

5.6.3. Trigger and Frequency

In the case of preliminary round A, B and C, the message should be sent after the end of each game, for the teams in that group.

The message for the whole preliminary round, which includes all teams, will not be triggered until the last game of the preliminary round is complete.

Trigger also after any major change.

5.6.4. Message Structure

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

Competitor /ExtendedResults /ExtendedResult

5.6.5. Message Values

The following table lists the Pool Standings of group in a team competition 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



Element	Attribute	M/O	Value	Comments
Result	Rank	0	Numeric Or String	Rank of the competitor in the corresponding phase. This attribute is optional because the team could get an invalid rank mark.
	Decelt	M	00	It could be string, because in the case of the whole preliminary round, it should follow the form nnD, where nn should be rank in the qualification preliminary round without leading zeroes (e.g.: 1D, 2D, 3D). It should be numeric for the rest of possibilities.
	ResultType	M	CC @ResultType	Result type, either rank or IRM for the corresponding phase
	IRM	0	CC @IRM	IRM for the particular group (or phase) Send just in the case @ResultType is IRM (see codes section)
	SortOrder	M	Numeric	It is mostly based on the rank, but it should be used to sort out rank ties as well as results without rank.

The following table describes in more detail the Competitor /ExtendedResults /ExtendedResult element in the case of Ice Hockey.

Туре	Code	Value	Description
ER_IH	IH_GP	Numeric	For @Type: Send proposed type
			For @Code:
			Send proposed code for number of games played
			For @Value:
			Games played indeed by the team competitor
	IH_W	Numeric	For @Type: Send proposed type
			For @Code: Send proposed code for wins
			For @Value: Wins by the team competitor
	IH_OTW	Numeric	For @Type: Send proposed type
			For @Code: Send proposed code for overtime wins
			For @Value: Overtime wins by the team competitor
	IH_OTL	Numeric	For @Type: Send proposed type
			For @Code: Send proposed code for overtime losses
			For @Value: Overtime losses by the team competitor
	IH_L	Numeric	For @Type: Send proposed type
			For @Code: Send proposed code for losses
			For @Value: Losses by the team competitor
	IH_PTS	N(3)	For @Type:



		990	Send proposed type	
			For @Code: Send proposed code for points	
			For @Value: Points by the team competitor	
IH_G	DF	(+)(-)N(3) (+)(-)990	For @Type: Send proposed type	
			For @Code: Send proposed code for goals difference	
			For @Value: Goals difference by the team competitor. Send the +/- signs always except for the case the goal difference is 0	
IH_G	F	N(3) 990	For @Type: Send proposed type	
			For @Code: Send proposed code for goals for	
			For @Value: Goals for by the team competitor	
IH_G	A	N(3) 990	For @Type: Send proposed type	
			For @Code: Send proposed code for goals against	
			For @Value: Goals against by the team competitor	
IH_W	/R	N(3) 990	For @Type: Send proposed type	
			For @Code: Send proposed code for IIHF World ranking for the previous full year	
			For @Value: IIHF World ranking for the previous full year for the team competitor	

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

Type /Code	Description	Expected
ER_IH /IH_GP	Games played indeed	Always in the case of group A, B or C
ER_IH / IH_W	Wins	Always in the case of group A, B or C
ER_IH /IH_OTW	Overtime wins	Always in the case of group A, B or C
ER_IH /IH_OTL	Overtime losses	Always in the case of group A, B or C
ER_IH /IH_L	Losses	Always in the case of group A, B or C
ER_IH /IH_PTS	Points	Always in the case of group A, B or C
ER_IH /IH_GDF	Goals difference	Always in the case of group A, B or C
ER_IH /IH_GF	Goals for	Always in the case of group A, B or C
ER_IH /IH_GA	Goals against	Always in the case of group A, B or C
ER_IH /IH_WR	IIHF World ranking for the previous full year	Send just in the case of the whole preliminary round message

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

Element	Attribut	M/O	Value	Comments
	е			
Competitor	Code	М	S(20) with	Athlete's ID
/Composition			no leading	
/Athlete			zeroes	



Element	Attribut e	M/O	Value	Comments
	Order	M	Numeric	The order will be according to the team roster in the case Competitor @Type=T

5.6.6. Message sort



5.7. Event Final Ranking

5.7.1. Description

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

5.7.2. Header Values

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

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5.7.3. Trigger and Frequency

The message will be triggered as soon as some ranking positions are definitive (not waiting for the bronze or gold medal games) in this case sent it with a ResultStatus = PARTIAL. Please, follow the general definition (UNOFFICIAL and OFFICIAL) when the event has finished.

Trigger also after any major change.

5.7.4. Message Structure

There are not optional elements defined for this message in the ODF Sport Messages Interface Document that should be included in the case of Ice Hockey.

5.7.5. 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 Ice Hockey, as well as the attributes that have an extended definition.

Element	Attribute	M/O	Value	Comments
Result	Rank	0	Numeric	Final rank of the competitor in the corresponding event. This attribute is optional because the skater may have got an invalid rank mark.
	ResultType	М	CC @ResultType	Result type, either "rank" or IRM for the corresponding event.
	IRM	0	CC @IRM	IRM for the particular event. Send just in the case @ResultType is IRM (see
				codes section)
	SortOrder	M	Numeric	This attribute is a sequential number with the order of the results for the particular event, if they were to be presented. It is mostly based on the rank, but it could be used to sort out rank ties as well as results without rank.

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



Element	Attribute	M/O	Value	Comments
Competitor	Code	М	S(20) with	Athlete's ID
/Composition			no leading	
/Athlete			zeroes	
	Order	М	Numeric	The order will be according to the team roster in
				the case Competitor @Type=T

5.7.6. Message sort



5.8. Event's Medallists

5.8.1. Description

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

5.8.2. Header Values

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

5.8.3. Trigger and Frequency

Please, follow the general definition.

5.8.4. Message Structure

Please, follow the general definition.

5.8.5. Message Values

Please, follow the general definition.

5.8.6. Message sort



5.9. Brackets

5.9.1. Description

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

5.9.2. Header Values

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

5.9.3. Trigger and Frequency

The message will be triggered as soon as some athlete/Team has qualified for the next round but the event has not finished, in this case sent it with a ResultStatus = INTERMEDIATE. Please, follow the general definition (UNOFFICIAL and OFFICIAL) when the event has finished.

5.9.4. Message Structure

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

- BracketItem /ExtBracketItems /ExtBracketItem (just in the case of women's losers' classification bracket items)
- CompetitorPlace/Competitor /Composition

Moreover, the following should be considered:

- For the men's competition
 - BracketItem /NextUnit should be informed in the case of the qualification play-offs, quarterfinals and semi-finals.
 - BracketItem /NextUnitLoser 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, semi-finals and quarterfinals
- For the women's competition
 - BracketItem /NextUnit should be informed in the case of the semifinals and classification games (#13 and #14).
 - BracketItem /NextUnitLoser should be informed in the case of the semi-finals and classification games (#13 and #14).
 - CompetitorPlace /PreviousUnit should be informed in the case of the gold medal game and the bronze medal game, classification games (#18 and #15)



5.9.5. Message Values

The following table lists the Brackets 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
BracketItems	Code	М	CC	Each BracketItems should include
			@BracketItemsCode	all BracketItem grouped by their
				CC @BracketItemsCode.
BracketItem	Code	М	Numeric	In general, it will be sent the game
			Or	number for each bracket item
			"tbd"	(e.g.: 17, 18, 19, 20).
				However, it may include "tbd" for
				to be defined, if the game number
				is not known.

The following table describes in more detail the BracketItem /ExtBracketItems /ExtBracketItem element in the case of Ice Hockey (just for women's losers' classification bracket items).

Element: BracketItem /ExtBracketItems /ExtBracketItem				
Type	Code	Value	Description	
EB_IH	IH_BI_CODE		For @Type: Send proposed type	
			For @Code: Send proposed code for bracket item code	
			For @Value: Bracket item code in the format Lnn, where L stands for loser and nn should be the game number (removing leading zeroes if it is the case). Example: L17, L18, etc.	

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

Type /Code	Description	Expected
EB_IH /IH_BI_CODE		Send just in the women's losers' classification bracket items, when the team competitors of the bracket items are not yet known.

5.9.6. Message sort

BracketItems @Code should be sorted by:

Men's competition:

 Qualification play-offs (ordered by game number), Quarterfinals and Semifinals (ordered according to qualification play-offs sequential logic) and finals (first gold game, and then bronze game).

Women's competition

• Semifinals (ordered by game number), finals (first gold game, and then bronze game) and classification games (first two games ordered by game number, and then for the two last classification games, the losers of the first classification games come in the last position).



5.10. Discipline/venue good morning

5.10.1. Description

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

5.10.2. Header Values

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

5.10.3. Trigger and Frequency

Please, follow the general definition.

5.10.4. Message Structure

Please, follow the general definition.

5.10.5. Message Values

Please, follow the general definition.

5.10.6. Message sort



5.11. Discipline/venue good night

5.11.1. Description

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

5.11.2. Header Values

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

5.11.3. Trigger and Frequency

Please, follow the general definition.

5.11.4. Message Structure

Please, follow the general definition.

5.11.5. Message Values

Please, follow the general definition.

5.11.6. Message sort

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