



# RunningBall Real Time Feeds

## Specifications

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Revision: > 40

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The purpose of this document is to provide an overview of the features and the functionality of the RunningBall real time data feeds.

The RunningBall data feeds are intended for fast and automated data transmission and evaluation. It is designed focused on good usability, reliability and the highest possible availability. Its modular design allows being adapted easily to the customer's needs.

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# 1 General Information

The purpose of this document is to provide an overview of the features and the functionality of the RunningBall real time data feeds.

The RunningBall data feeds are intended for fast and automated data transmission and evaluation. It is designed focused on good usability, reliability and the highest possible availability. Its modular design allows being adapted easily to the customer's needs.

## 1.1 Revision History

| Revision | Information  | Reference Date |
|----------|--|----------------|
| 00       | Initial version (Mitterer).  |                |
| 01       | Structural changes (Mitterer).   | 12/12/2008     |
| 02       | Layout changes (Marko).  | 13/12/2008     |
| 03       | Rewrite (Mitterer).  | 19/12/2008     |
| 04       | ID mapping information added (Marko)   | 12/03/2009     |
| 05       | XML and XML over tcp updates (Mitterer).   | 08/07/2009     |
| 06       | New events and partly more detailed information, new logo (Mitterer).  | 12/11/2009     |
| 07       | Rewrite of streamconnection (Mitterer).  | 01/12/2009     |
| 08       | Http Pull Interface added (Marko).   | 03/12/2009     |
| 09       | Ball Position, Substitution, Stoppage Time & Scorer Events added (Mitterer).   | 10/01/2010     |
| 10       | XML adaption, Player data, event number for game conditions and system message, line break definition for socket connections added (Mitterer).   | 27/04/2010     |
| 11       | Oracle as new database option added (Mitterer).  | 15/07/2010     |
| 12       | Multisport extensions, structural changes (Posch).   | 03/01/2011     |
| 13       | Minor corrections, new special message handling Snooker extensions, League parameters, updated event code mapping (Posch).   | 16/06/2011     |
| 14       | Updated Basketball event codes, minor corrections, new special message handling (Posch).   | 12/10/2011     |
| 15       | Soccer event reason mapping corrections (Posch).   | 20/12/2011     |
| 16       | Extensions for Darts (Mappings); Extensions for Soccer (Mappings). ValueEvent (Schema/Description/Samples); Line-ups: samples corrected, DB schema added; PlayerName attribute descriptions and samples; BallPosition zone mappings added (Posch). | 09/07/2012     |
| 17       | Ice hockey mappings; RelatedEvent added for Database feeds (Posch).  | 13/07/2012     |
| 18       | Extensions for Volleyball/Beach Volleyball (Mappings); Rework jersey colour description (Posch).   | 31/01/2013     |

| Revision | Information  | Reference Date |
|----------|--|----------------|
| 19       | Handball: added mappings; Minor corrections;<br>Common: 'Substitution update' event description & samples;<br>Common: Scout information added; Common: Referee information added; Common: SportsTickerData added; All sports: Updated SystemMessage descriptions texts; Soccer: correction of shot events (documentation only); Soccer: added PPEN1/2; Player data confirmation added (Posch).   | 16/07/2013     |
| 20       | Snooker: Ball Positions added (pocket information); Player data confirmation sample fixed (TCP text); Volleyball/ beach volleyball: substitutions removed (not used in scouting), minor corrections in pre-game events; 'hasPlayerData' for leagues added; (Beach) Volleyball/Ice Hockey: 'score' property extensions; HTTP XML Feed workflow description updated; TCP feed client implementation requirements added; Minor corrections; references to Tennis and Darts removed. (Posch) | 11/12/2013     |
| 21       | Snooker: Added 'Snooker' event codes.<br>Common events: fixed descriptions for ID515/516 (Posch/Meznaric).<br>System Message Event descriptions updated.<br>Soccer: CONF_GOAL, BREAKAWAY added.<br>Series/SeriesMatch added.   | 04/03/2014     |
| 22       | Updated response codes for register/unregister/unbook requests; added Home Advantage; updated the whole documentation; competition parameter mapping updated (Posch/Meznaric).   | 10/03/2015     |
| 23       | Fix wrong used term for homeAdvantage parameter in the XML Game List examples.   | 21/04/2015     |
| 24       | Soccer events: Possible corner home/away and No corner home/away (see chapter 8.1.2 Soccer Events)<br>Ice hockey events: Goal confirmation home/away.<br>New event reasons for soccer: player on substitution bench and trainer.<br>System Messages for all sports were updated.<br>Possession statistics in TCP TXT protocol.   | 03/08/2015     |
| 25       | New event for all sports: Game cancelled.  | 13/08/2015     |
| 26       | System Messages added in <i>Table 78 – General System Messages</i><br>Update regarding the jersey colour design.   | 08/01/2016     |
| 27       | Cricket: mappings added<br>Common: "Assist" event code added;<br>"GGCC" event code added<br>Minor corrections  | 02/05/2016     |
| 28       | Cricket: "Dot ball" event codes added, ball data value events documented.<br>Volleyball: New competition parameter added.<br>(Beach)Volleyball: "Start service" event codes added.<br>Soccer: New card and throw in workflow added.<br>Snooker removed.  | 04/07/2016     |
| 29       | Game Possession Statistics Added   | 10/11/2016     |
| 30       | Cricket: additional system messages added and edited; penalty and dismissal events as well as the value events; competition match format added; extended ball data values<br>Ice hockey: additional system message added<br>Minor corrections  | 03/04/2017     |

| Revision  | Information   | Reference Date |
|-----------|---|----------------|
| <b>31</b> | Player position event added; new events for soccer, basketball, volleyball and beach volleyball   | 03/07/2017     |
| <b>32</b> | Formation changed event added; minor corrections  | 30/10/2017     |
| <b>33</b> | Video Assistant Referee (events) league parameters and Sin Bin added for soccer (league parameter and System Message)<br>ABBA penalty system added for soccer, handball and ice hockey<br>Best of 7 competitions added for volleyball<br>Error code for pullservice added when parameters are invalid | 29/01/2018     |
| <b>34</b> | New competition types added for cricket (see chapter 8.15.7 <i>Cricket</i> )  | 09/04/2018     |
| <b>35</b> | Some competition types for cricket renamed; Cricket Ball Data Events: batting connection 23 renamed and 27 (Spliced) added  | 07/05/2018     |
| <b>36</b> | New table for Ice Hockey Player Position Mapping added see chapter 8.11.3)  | 03/07/2018     |
| <b>37</b> | New Soccer league parameter ID 45 VAR (see chapter 8.15.1 Soccer)   | 06/08/2018     |
| <b>38</b> | Expected goal event added; minor corrections  | 08/10/2018     |
| <b>39</b> | Injury break events introduced for either competitor in soccer  | 11/02/2019     |
| <b>40</b> | Baseball: new sport mappings added  | 18/03/2019     |

**Table 1 – Revision History**

## 1.2 Glossary of Terms and Abbreviations

| Term/Abbreviation      | Description  |
|------------------------|--|
| <b>DB</b>              | Database   |
| <b>Game Conditions</b> | Information about the basic circumstances of a game  |
| <b>Game Period</b>     | The different stages of a sports event. (e.g. 1st half, 3rd period, 2nd quarter, half-time break, extra time etc.)   |
| <b>Game State</b>      | Describes the current situation on the pitch in a soccer game; in soccer the Game State generally informs about which team is in possession of the ball, which team is attacking and it highlights possible goal threats. Danger is sent/generated in all sports when it is currently not possible to provide data (disconnections, broadcasting interruptions). |
| <b>Game Status</b>     | Describes the current coverage status of a game in the RunningBall data base; a game can be "Open" (the coverage has not started yet), "Finished" (the coverage ended), "Cancelled" (the coverage was cancelled), "Running" (the game is currently covered live) or "Suspended" (the game is officially cancelled).  |
| <b>Game Zone</b>       | Describes areas of the pitch. Game Zones are indicators to determine the Game State.   |
| <b>GC</b>              | Game Conditions  |
| <b>ISO</b>             | International Organization for Standardisation   |
| <b>JDBC</b>            | Java Database Connectivity   |
| <b>Live Game</b>       | Game that is covered directly at the venue (in contrast to a TV Game)  |

| Term/Abbreviation     | Description  |
|-----------------------|--|
| <b>MSSQL</b>          | Microsoft SQL Server   |
| <b>MySQL</b>          | MySQL Server   |
| <b>RB</b>             | RunningBall  |
| <b>Scout</b>          | Person who collects live data of sports events for RunningBall                         |
| <b>System Message</b> | Game-related message that provides the customers with additional information           |
| <b>TCP</b>            | Transmission Control Protocol  |
| <b>TV Game</b>        | Game that is reported by a Scout who is watching a live broadcast of the relevant game |
| <b>URL</b>            | Uniform Resource Locator   |
| <b>XML</b>            | Extensible markup language   |

**Table 2 – Terms and Abbreviations**

## 2 Features

### 2.1 General Aspects

- > A fast setup time due to predefined scripts
- > An elaborate handling of unforeseen incidents during a game
- > The lowest possible amount of data with the highest possible information content
- > All dates and times are in GMT+0, no matter where a game is reported from
- > An easy-to-use data format for real time data processing or statistical evaluation
- > The data is cached in case of connection loss
- > A good scalability for transferring a lot of data at the same time

### 2.2 Information Content

- > Master data (country, competition, competitor, venue)
- > Game fixture data
- > Game event
- > Additional game information messages
- > Game Conditions (attendance, pitch condition, weather condition)

### 2.3 Standard Game Events

The game events sent with the data feed contain the following basic information:

| Attribute          | Mandatory?<br>(Yes/No) | Description   |
|--------------------|------------------------|---|
| <b>tickerId</b>    | Yes                    | The unique ID of the game the event is referring to.  |
| <b>eventCode</b>   | Yes                    | Identifies the action described by the event.<br>In most cases, the event code is related to any game-flow-describing activities such as fouls, cards, attacks or game state changes (kick-off, start of 1st half, ...), but also data-feed-related events such as System Messages, Game Conditions or stoppage time information.<br>For detailed information about all event codes provided by the data feed see chapter <i>8.1 Event Code Mapping</i> . |
| <b>eventNumber</b> | Yes                    | The sequential number that is unique for each event of a game; every game starts with number=0 and increases with each event send by the feed.  |
| <b>minute</b>      | Yes                    | The current playtime of the game/period in minutes; a soccer game for example counts up from 0 to 90+ while basketball game minute values decrease from 10 or 12 to 0.  |
| <b>tickerState</b> | Yes                    | The current Game Period the game is in; e.g. 'first half' when a soccer game is in the first 45 minutes of its regular playtime.<br>Possible values for all supported sports are described in chapter <i>8.3 Ticker State Handling</i> .  |
| <b>timestamp</b>   | Yes                    | GMT timestamp describing the time when the event occurred.  |

|  |     |  |
|--|-----|--|
| <b>currentPlaytime</b>                 | Yes | The current playtime of the game in milliseconds; the values correlate with minute.  |
| <b>clockRunning</b>                    | Yes | Set to 'true' when the game clock is running and the game time (currentPlaytime, minute) is counting up- or downwards.<br>clockRunning is important for sports where the clock is interrupted often (e.g. basketball), but may also change if a game is in a paused state.<br>The value correlates with the "Game clock start/stop" events and provides information of the game clock state of the game. |
| <b>scoreHome</b>                       | Yes | The current score of the competitor 1; the value depends on the sport of the game. Detailed information on score mapping is provided in chapter 8.13 Score Mapping.  |
| <b>scoreAway</b>                       | Yes | The current score of competitor 2; the value depends on the sport of the game. Detailed information on score mapping see chapter 8.11 Score Mapping.   |
| <b>statistics</b>                      | No  | An array of statistic values, for example the number of free throws or yellow cards; the values are added, when a statistic changes, e.g. when a goal is scored, the statistic values for goals are updated.   |
| <b>score</b>                           | No  | An array of score values for sports having more than one relevant score information per competitor. An example is given in the Http XML (chapter 7.1 Http XML). For detailed information on score mapping see chapter 8.11 Score Mapping.  |
| <b>relatedSportsTickerEventNumbers</b> | No  | Some specific events are related to one or more other events that were sent earlier; example: An event with number 520 provides scorer-related information of a goal event with relatedSportsTickerEventNumber{519}.   |
| <b>clearedEventNumbers</b>             | No  | Due to the real-time character of a data feed it might be necessary to delete wrong game event information. clearedEventNumbers refers to the events that are deleted by a specific clear event such as Cancel last sent.  |

**Table 3 – Game Event Attributes**

Specific event types also provide the mandatory information of a game event, but might extend it with further properties.

In this chapter, a general overview of all event types sent by the RB data feed is given. For detailed information on the implementation of the specific feed types (HTTP, TCP, Database), have a look at chapter 5 Database.

They individual event types are not necessarily available for all provided sports. See chapter 2.8 *Matrix of Supported Special Events* for sport-specific information.

## 2.4 Special Event with Divergent Format

### 2.4.1 Ball Position Event

A ball position event is sent to provide information about the sports-specific Game Zone of the field where an event is taking place, e.g. where a free kick is taken. Ball position events always refer to other events using relatedSportsTickerEventNumber.

Detailed information about ball position zone mappings is provided in chapter 8.17 *Ball Position Mappings*.

| Attribute     | Mandatory?<br>(Yes/No) | Description   |
|---------------|------------------------|---|
| <b>zone</b>   | Yes                    | The sport-specific zone code describing the area of the field where the event has taken place. Zones exist in both halves of the field, so the direction is determined by the <i>teamId</i> . |
| <b>teamId</b> | Yes                    | The ID of the team performing the action, e.g. the team taking the free kick.   |

**Table 4 – Ball Position – Event Attributes**

#### 2.4.2 Substitution Event

This event informs about a substitution of players, e.g. in soccer. Player-related data is only provided in certain competitions.

| Attribute            | Mandatory?<br>(Yes/No) | Description  |
|----------------------|------------------------|--|
| <b>tickerId</b>      | Yes                    | The unique ID of the game the event is referring to.   |
| <b>jerseyIn</b>      | Yes                    | The jersey number of the player joining the game.  |
| <b>jerseyOut</b>     | Yes                    | The jersey number of the player leaving the game.  |
| <b>playerIn</b>      | Yes                    | The unique ID of the player joining the game. Player information is optional, because player data is only provided for some competitions.<br>Note: If no player information is available, <i>playerIn</i> is set to 0. |
| <b>playerOut</b>     | Yes                    | The unique ID of the player leaving the game.<br>Note: If no player information is available, <i>playerOut</i> is set to 0.  |
| <b>playerInName</b>  | No                     | The name of the player related to <i>playerIn</i> .  |
| <b>playerOutName</b> | No                     | The name of the player related to <i>playerOut</i> .   |

**Table 5 – Substitution – Event Attributes**

#### 2.4.3 Substitution Update Event

Substitution update events are used to correct or to extend information of a substitution event that was sent previously. The relation to the substitution event to be updated is provided by the “relatedSportsTickerEventNumber” property.

| Attribute        | Mandatory?<br>(Yes/No) | Description                                       |
|------------------|------------------------|---|
| <b>jerseyIn</b>  | Yes                    | The jersey number of the player joining the game. |
| <b>jerseyOut</b> | Yes                    | The jersey number of the player leaving the game. |

| Attribute                             | Mandatory?<br>(Yes/No) | Description  |
|---------------------------------------|------------------------|--|
| <b>playerIn</b>                       | Yes                    | The unique ID of the player joining the game. Player information is optional, because player data is only provided for some competitions.<br>Note: If no player information is available, <i>playerIn</i> is set to 0. |
| <b>playerOut</b>                      | Yes                    | The unique ID of the player leaving the game.<br>Note: If no player information is available, <i>playerOut</i> is set to 0.  |
| <b>playerInName</b>                   | No                     | The name of the player related to <i>playerIn</i> .  |
| <b>playerOutName</b>                  | No                     | The name of the player related to <i>playerOut</i> .   |
| <b>relatedSportsTickerEventNumber</b> | Yes                    | The event number of the substitution event to be updated.  |
| <b>eventReasonId</b>                  | No                     | The reason (EventReason) for the substitution.   |

**Table 6 – Substitution Update – Event Attributes**

#### 2.4.4 Player-Related Events

Player-related events contain additional player-related information to events, e.g. goals or cards, referred by the respective relatedSportsTickerEventNumber.

| Attribute                             | Mandatory?<br>(Yes/No) | Description  |
|---------------------------------------|------------------------|--|
| <b>jerseyNumber</b>                   | Yes                    | The jersey number of the respective player.  |
| <b>playerId</b>                       | Yes                    | The unique ID of the player.<br>Note: If no player information is available, <i>playerId</i> is set to -1. |
| <b>playerName</b>                     | No                     | The name of the player.  |
| <b>eventReasonId</b>                  | Yes                    | The reason for the event (e.g. why a card was awarded) or the method a goal was scored.                    |
| <b>relatedSportsTickerEventNumber</b> | Yes                    | The event number the player-related information is provided for.   |

**Table 7 – Player-Related Events – Event Attributes**

#### 2.4.5 System Message Event

System Messages are used to send predefined, custom messages for various situations that are not of statistical relevance but are important in case of extraordinary situations during the game, for example regarding game delays, cancellations or score corrections.

| Attribute        | Mandatory?<br>(Yes/No) | Description   |
|------------------|------------------------|---|
| <b>message</b>   | Yes                    | The content of the System Message.                          |
| <b>messageId</b> | Yes                    | System Message identifiers (see 8.9 System Message Mapping) |

**Table 8 – System Message – Event Attributes**



## 2.4.6 Stoppage Time Event

This event indicates the official stoppage time added to the regular time shown by game officials.

| Attribute      | Mandatory?<br>(Yes/No) | Description                             |
|----------------|------------------------|---|
| <b>minutes</b> | Yes                    | The displayed stoppage time in minutes. |

Table 9 – Extra Time – Event Attributes

## 2.4.7 Game Condition Event

Game Conditions are typically sent before a game is started to indicate under which conditions it will take place. These conditions may also change during a game, for example if it starts to rain or if many spectators leave early.

| Attribute         | Mandatory?<br>(Yes/No) | Description  |
|-------------------|------------------------|--|
| <b>attendance</b> | Yes                    | The attendance at the venue (see chapter 8.6.3 <i>Attendance</i> ).                                      |
| <b>pitch</b>      | Yes                    | The condition of the field; the values depend on the sport (see chapter 8.6.1 <i>Pitch Conditions</i> ). |
| <b>weather</b>    | Yes                    | The current weather conditions at the venue (see chapter 8.6.2 <i>Weather Conditions</i> ).              |

Table 10 – Game Condition – Event Attributes

## 2.4.8 Generic Game Conditions Changed Event

The event *Generic Game Conditions Changed* event is exclusively featured in cricket. It indicates a change if the Game Conditions, for example if it starts to rain or if many spectators leave early.

| Attribute         | Mandatory?<br>(Yes/No) | Description   |
|-------------------|------------------------|---|
| <b>attendance</b> | No                     | The attendance at the venue (see chapter 8.6.3 <i>Attendance</i> ).   |
| <b>bounce</b>     | No                     | The measure of how consistent the bounce is (see chapter 8.6.5 <i>Bounce</i> ).                             |
| <b>light</b>      | No                     | The current light conditions at the venue (see chapter 8.6.6 <i>LiLight</i> ).                              |
| <b>matchDay</b>   | No                     | The current matchday  |
| <b>movement</b>   | No                     | The measure of how much the ball is moving in the air or off the pitc (see chapter 8.6.4 <i>Movement</i> ). |
| <b>pitch</b>      | No                     | The condition of the field; the values depend on the sport (see chapter 8.6.1 <i>Pitch Conditions</i> ).    |
| <b>weather</b>    | No                     | The current weather conditions at the venue (see chapter 8.6.2 <i>Weather Conditions</i> ).                 |

Table 11 – Generic Game Condition – Event Attributes

#### 2.4.9 Time Correction Event

When an event is entered too late *Time Correction* is used to indicate that it has actually occurred earlier including an approximate timestamp. The accuracy of this information depends on the references that are used for double checking the event.

##### Example:

A yellow card in the 20th minute was missed. It was sent afterwards in minute 40. An additional *Time Correction* refers to the associated event (`relatedSportsTickerEventNumber`) and provides information about the corrected time.

| Attribute                             | Mandatory?<br>(Yes/No) | Description   |
|---------------------------------------|------------------------|---|
| <b>correctPlaytime</b>                | Yes                    | The corrected game time in milliseconds<br>2.160.000 would indicate that the event occurred in minute 36. |
| <b>relatedSportsTickerEventNumber</b> | Yes                    | The number of the event the <i>Time Correction</i> refers to.   |

Table 12 – Time Correction – Event Attributes

#### 2.4.10 Line-up Event

| Attribute            | Mandatory?<br>(Yes/No) | Description  |
|----------------------|------------------------|--|
| <b>teamId</b>        | Yes                    | The unique ID of the competitor.   |
| <b>squadTypeId</b>   | Yes                    | A specification of the line-up entry, e.g. "Starting 11" or "Bench players" (see chapter 8.13 <i>Score Mapping</i> ).  |
| <b>lineupEntries</b> | Yes                    | A list of players of the squad containing:<br>> playerId: the unique ID of the player.<br>> imported_player_id: the configured imported player ID from other platforms (available only on special request)<br>> jerseyNumber: the jersey number of the player.<br>> jerseyName: the name of the player.<br>> player_position_id: position of the player on the field (available only on special request, see chapter 8.11 <i>Player Position Mapping</i> )<br>> starting_pitcher: boolean value indicating the starting pitcher of a team (available only in Baseball)<br>> designated_hitter: boolean value indicating the designated hitter of a team (available only in Baseball) |

Table 13 – Line-up – Event Attributes

#### 2.4.11 Cancellation and Clear Events

*Clear* and *Cancel* events are used to correct invalid events. In database feeds, 'cleared' events are marked the other way around: The 'clear' event does not provide information about affected events. Cleared event refer to the event that cleared them (*clearedBy* column).

The following examples are provided in the http XML format described in chapter 7.1.3 *Sports Ticker Event*.

> Cancellation Event:

*Cancellation* events are sent after a wrong event was entered which should be cancelled with the following event.

```
<event_list date_generated="2010-12-14T16:11:14.722Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="136931" minute="1" event_number="44" event_code_id="1025"
    date="2010-12-14T16:00:32.791Z" event_code="Corner Home"
    tickerstate_id="2" tickerstate="1st half" score_home="1"
    score_away="1" statistics="2049=0 1025=2" seconds="11"
    currentPlaytime="11620" clockRunning="true"/>
  <event game_id="136931" minute="1" event_number="45" event_code_id="256"
    date="2010-12-14T16:00:34.879Z" event_code="Cancel" tickerstate_id="2"
    tickerstate="1st half" score_home="1" score_away="1" clears_event="44"
    statistics="2049=0 1025=1" seconds="13" currentPlaytime="13709"
    clockRunning="true"/>
</event_list>
```

If a statistical event is cancelled, *Cancel* does also provide updated statistic values. In the given example the value for "1025" (the corners of competitor 1) decreased.

> Event-Specific Cancellation Event:

There are also specific cancellations codes for statistical events that might occur at any time of a game and are related to a specific event.

```
<event_list date_generated="2010-12-14T16:19:05.097Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="136904" minute="118" event_number="18"
    event_code_id="1029"
    date="2010-12-14T16:08:23.190Z" event_code="Goal Home"
    tickerstate_id="2" tickerstate="1st half" score_home="1" score_away="0"
    statistics="2053=0 1029=1" seconds="7036" currentPlaytime="7036014"
    clockRunning="true"/>
  <event game_id="136904" minute="118" event_number="19" event_code_id="265"
    date="2010-12-14T16:08:25.903Z" event_code="Scorer Preview"
    tickerstate_id="2" tickerstate="1st half" score_home="1" score_away="0"
    seconds="7038" currentPlaytime="7038727" clockRunning="true"/>
  <event game_id="136904" minute="118" event_number="20"
    event_code_id="2068" date="2010-12-14T16:08:29.650Z"
    event_code="Kickoff Away"
    tickerstate_id="2" tickerstate="1st half" score_home="1" score_away="0"
    seconds="7042" currentPlaytime="7042474" clockRunning="true"/>
  <event game_id="136904" minute="118" event_number="21"
    event_code_id="2075" date="2010-12-14T16:08:29.650Z" event_code="Safe
    Away"
    tickerstate_id="2" tickerstate="1st half" score_home="1"
    score_away="0" seconds="7042" currentPlaytime="7042474"
    clockRunning="true"/>
  <event game_id="136904" minute="118" event_number="22"
    event_code_id="2075" date="2010-12-14T16:08:53.815Z" event_code="Safe
    Away"
    tickerstate_id="2" tickerstate="1st half" score_home="1"
    score_away="0" seconds="7066" currentPlaytime="7066639"
```

```

        clockRunning="true"/>
    <event game_id="136904" minute="118" event_number="23"
event_code_id="1030" date="2010-12-14T16:09:04.905Z"
event_code="Cancel Goal Home" tickerstate_id="2" tickerstate="1st
half" score_home="0"
        score_away="0" related_events="18" statistics="2053=0 1029=0"
seconds="7077" currentPlaytime="7077727" clockRunning="true"/>
</event_list>

```

#### > Clear Event

*Clear* events are sent when one or more events need to be marked as invalid afterwards.

```

<event_list date_generated="2010-12-14T16:43:40.745Z" pusher_id="3"
xmlns="http://rball.com/eventpusher/data/xmlbeans">
    <event game_id="136904" minute="18" event_number="44" event_code_id="1024"
date="2010-12-14T16:32:59.070Z" event_code="Attack Home"
        tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="1" statistics="2048=0 1024=2" seconds="1071"
currentPlaytime="1071309" clockRunning="true"/>
    <event game_id="136904" minute="18" event_number="45"
event_code_id="1052" date="2010-12-14T16:32:59.681Z"
event_code="Danger Home" tickerstate_id="2" tickerstate="1st half"
score_home="0" score_away="1" seconds="1071" currentPlaytime="1071920"
clockRunning="true"/>
    <event game_id="136904" minute="18" event_number="46" event_code_id="1026"
date="2010-12-14T16:32:59.681Z" event_code="Dangerous Attack Home"
        tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="1" statistics="2050=0 1026=1" seconds="1071"
currentPlaytime="1071920" clockRunning="true"/>
    <event game_id="136904" minute="19" event_number="47" event_code_id="1039"
date="2010-12-14T16:33:11.858Z" event_code="Shot (on target) Home"
        tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="1" statistics="1039=1 2063=0" seconds="1084"
currentPlaytime="1084098" clockRunning="true"/>
    <event game_id="136904" minute="19" event_number="48" event_code_id="2075"
date="2010-12-14T16:33:21.414Z" event_code="Safe Away"
        tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="1" seconds="1093" currentPlaytime="1093655"
clockRunning="true"/>
    <event game_id="136904" minute="19" event_number="49" event_code_id="2077"
date="2010-12-14T16:33:21.414Z" event_code="Goal kick Away"
        tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="1" statistics="1053=0 2077=0" seconds="1093"
currentPlaytime="1093655" clockRunning="true"/>
    <event game_id="136904" minute="19" event_number="50" event_code_id="257"
date="2010-12-14T16:33:29.948Z" event_code="Clear" tickerstate_id="2"
        tickerstate="1st half" score_home="0" score_away="1" clears_event="47"
statistics="1039=0 2063=0" seconds="1102" currentPlaytime="1102190"
clockRunning="true"/>
</event_list>

```

The given example illustrates a situation where a shot on goal was cleared after further events occurred, but the shot was recognised as incorrect information.

### > Reset Period

A special use case of the *Clear* event is clearing a game period. In the example below the 2<sup>nd</sup> half of the game was started by accident and further events were entered. Therefore, no cancellation of *Start 2<sup>nd</sup> half* is possible any more.

If a period of a game is reset, all events of this period are cleared and the ticker state is set to its previous value, in the example the game is set back to *Pause*.

```
<event_list date_generated="2010-12-14T16:53:35.587Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="136904" minute="28" event_number="53" event_code_id="1"
    date="2010-12-14T16:42:53.813Z" event_code="Stop 1st half"
    tickerstate_id="4" tickerstate="Pause" score_home="0" score_away="1"
    seconds="1666" currentPlaytime="1666056" clockRunning="true"/>
  <event game_id="136904" minute="46" event_number="54" event_code_id="13"
    date="2010-12-14T16:42:55.925Z" event_code="Start 2nd half, kickoff:"
    tickerstate_id="8" tickerstate="2nd half" score_home="0"
    score_away="1" seconds="2700" currentPlaytime="2700000"
    clockRunning="true"/>
  <event game_id="136904" minute="46" event_number="55" event_code_id="1051"
    date="2010-12-14T16:43:10.225Z" event_code="Safe Home"
    tickerstate_id="8" tickerstate="2nd half" score_home="0"
    score_away="1" seconds="2714" currentPlaytime="2714298"
    clockRunning="true"/>
  <event game_id="136904" minute="46" event_number="56" event_code_id="1024"
    date="2010-12-14T16:43:14.988Z" event_code="Attack Home"
    tickerstate_id="8" tickerstate="2nd half" score_home="0"
    score_away="1" statistics="2048=0 1024=3" seconds="2719" currentPlaytime="2719059"
    clockRunning="true"/>
  <event game_id="136904" minute="46" event_number="57" event_code_id="257"
    date="2010-12-14T16:43:26.057Z" event_code="Clear" tickerstate_id="4"
    tickerstate="Pause" score_home="0" score_away="1" clears_event="56
55 54" seconds="2730" currentPlaytime="2730130" clockRunning="true"/>
</event_list>
```

### > Correct Statistics

The CSTAT event basically behaves as other clear or cancellation events. CSTAT clears the event specified by the related event number and corrects the game statistics. Optionally, a replacement event is sent after CSTAT.

In the example below the *Error Away* (event\_number=24) is cleared afterwards by sending *CSTAT* (eventNumber=27) and replaced with a *Block Home* (event\_number=28).

```
<event_list date_generated="2014-01-10T11:48:25.176Z" pusher_id="1"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="334293" minute="1" event_number="24"
event_code_id="2437" date="2014-01-10T09:06:19.253Z"
event_code="Error Away"
  tickerstate_id="2101" tickerstate="1st set" score_home="0"
  score_away="0" statistics="1413=0 2437=1" currentPlaytime="119258"
  clockRunning="true" score="1421=2 2445=2"/>
  <event game_id="334293" minute="1" event_number="25" event_code_id="1421"
    date="2014-01-10T09:06:19.253Z" event_code="Point Home"
    tickerstate_id="2101" tickerstate="1st set" score_home="0"
```

```

score_away="0" statistics="2445=2 1421=3" currentPlaytime="119258"
clockRunning="true" score="1421=3 2445=2"/>
<event game_id="334293" minute="2" event_number="26" event_code_id="1431"
date="2014-01- 10T09:06:20.020Z" event_code="Point confirmation Home"
tickerstate_id="2101" tickerstate="1st set" score_home="0"
score_away="0" currentPlaytime="120025" lockRunning="true"
score="1421=3 2445=2"/>
<event game_id="334293" minute="8" event_number="27" event_code_id="279"
date="2014-01- 10T09:12:46.917Z" event_code="Correct statistics"
tickerstate_id="2101" tickerstate="1st set" score_home="0"
score_away="0" related_events="24" statistics="1413=0 2437=0"
currentPlaytime="506923" clockRunning="true" score="1421=3 2445=2"/>
<event game_id="334293" minute="8" event_number="28" event_code_id="1410"
date="2014-01-10T09:12:46.917Z" event_code="Block Home"
tickerstate_id="2101" tickerstate="1st set" score_home="0"
score_away="0" statistics="1410=2 2434=0" currentPlaytime="506923"
clockRunning="true" score="1421=3 2445=2"/>
</event_list>

```

#### 2.4.12 Value Event

Value events provide additional event-specific information, based on the type of event. Unlike other special events (ball position, player-related events), value events do not have a single specific event code. They can only occur together with a defined set of event codes.

| Attribute             | Mandatory?<br>(Yes/No) | Description  |
|-----------------------|------------------------|--|
|                       |                        | <p>A list of value event data; [1-n] entries, depending on the event code.</p> <ul style="list-style-type: none"> <li>&gt; valueEventType: Type of the value event parameter, e.g. 'shirtColor' on 'Jersey changed' events.</li> <li>&gt; dataType: Data type of the parameter, you can always expect the same data type for a [valueEventType].</li> <li>&gt; 1 = String</li> <li>&gt; 2 = Boolean</li> <li>&gt; 3 = Integer</li> <li>&gt; 4 = Long</li> <li>&gt; 5 = Double</li> <li>&gt; 6 = Date</li> <li>&gt; value: The value of the parameter, provided as string.</li> </ul> |
| <b>valueEventData</b> | Yes                    |  |

**Table 14 – Value Event – Event Attributes**

**Note:** Only the database feed format (see chapter 5.1 *Database*) contains the full [type,dataType,value] information, but the data type is of an event type that is fixed and does not need a dynamic data type mapping.

More detailed information on value events is provided in chapter 8.16 *Value Event Mappings*.

#### 2.4.13 Player Data Confirmation

This event confirms that player-related information regarding an event is correct. It includes a reference to the event to be confirmed (e.g. goals, cards and substitution events).

| Attribute                                  | Mandatory?<br>(Yes/No) | Description                               |
|--|------------------------|---|
| <b>relatedSportsTicker<br/>EventNumber</b> | Yes                    | A reference to the event to be confirmed. |

**Table 15 – Player Data Confirmation – Event Attributes**

```
<event_list date_generated="2013-07-16T08:46:11.670Z" pusher_id="1"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="319129" minute="2" event_number="3"
    event_code_id="2058" date="2013-07-16T08:46:11.360Z"
    event_code="Yellow card Away" tickerstate_id="2"
    tickerstate="1st half" score_home="0" score_away="0"
    statistics="1034=1 2058=1" seconds="102"
    currentPlaytime="102384" clockRunning="true"/>
  [...]
  <event game_id="319129" minute="2" event_number="5"
    event_code_id="285" date="2013-07-16T08:46:15.842Z"
    event_code="Player data for Yellow card in the 2. minute
confirmed." tickerstate_id="2" tickerstate="1st half"
    score_home="0" score_away="0" related_events="3"
    related_event_codes="2058" seconds="106"
    currentPlaytime="106865" clockRunning="true"/>
</event_list>
```

## 2.5 Keep Alive Event

Keepalive events are sent to ensure connectivity of a feed. This information should also be used by a receiver of the feed to monitor the feed status.

| Attribute         | Mandatory?<br>(Yes/No) | Description   |
|-------------------|------------------------|---|
| <b>Id</b>         | Yes                    | The unique ID of the feed.                            |
| <b>providerId</b> | Yes                    | The timestamp when the keepalive event was generated. |

**Table 16 – Keepalive Event – Event Attributes**

## 2.6 Master Data Events

Master data is basic information about games and related objects such as competitors, competitions, countries and venues. Not all feed interfaces provide the full information of the described entities in this chapter and implementations may differ between the messaging formats.



The following tables should give an overview of the general structure of master data entities:

| Attribute                | Mandatory? (Yes/No) | Description   |
|--------------------------|---------------------|---|
| <b>Id</b>                | Yes                 | The unique ID of the game.  |
| <b>homeTeamId</b>        | Yes                 | The unique ID of competitor 1 (described in chapter 2.6.5 <i>Competitor</i> ).  |
| <b>foreignTeamId</b>     | Yes                 | The unique ID of competitor 2 (described in chapter 2.6.5 <i>Competitor</i> ).  |
| <b>leagueId</b>          | Yes                 | The unique ID of the competition in which the game takes place (leagues/competitions are described in 2.6.3 <i>Competition</i> ). |
| <b>coverageId</b>        | Yes                 | Coverage information about the game:<br>> 0 = Live Game<br>> 1 = TV Game  |
| <b>playStateId</b>       | Yes                 | The current game status; see chapter 8.4 <i>Game Status Mapping</i> for further details.  |
| <b>stadiumId</b>         | Yes                 | The unique ID of the venue where the game takes place.<br>Refers to a venue as described in chapter 2.6.4 <i>Venue</i> .          |
| <b>dateTime</b>          | Yes                 | Game start time   |
| <b>neutralGround</b>     | Yes                 | Is the game performed on neutral ground, e.g. at a World Cup tournament?  |
| <b>scoutConfirmed</b>    | Yes                 | Has the Scout confirmed?  |
| <b>oddsAvailable</b>     | Yes                 | Are odds events available for the game? (deprecated)  |
| <b>liveOddsAvailable</b> | Yes                 | Are live odds available? (deprecated)   |
| <b>booked</b>            | Yes                 | Have I booked this game?  |
| <b>refereeId</b>         | Yes                 | The unique ID of the game's referee (referees are described in chapter 2.6.6 <i>Referee</i> )                                     |
| <b>scoutId</b>           | Yes                 | The unique ID of the game's scout (scouts are described in chapter 2.6.7 <i>Scout</i> )   |
| <b>homeAdvantageId</b>   | Yes                 | The competitor ID with home advantage; see chapter 8.5 <i>Home Advantage Mapping</i> for further details                          |

Table 17 – Master Data – Game Attributes

### 2.6.1 Game Data

Game data provides (optional) information about games in a flexible data structure (for future extensions).

| Attribute          | Mandatory? (Yes/No) | Description                                     |
|--------------------|---------------------|---|
| <b>parameterId</b> | Yes                 | The (English) name of the respective parameter. |



| Attribute          | Mandatory?<br>(Yes/No) | Description   |
|--------------------|------------------------|---|
| <b>typeId</b>      | Yes                    | <p>The data type of the parameter</p> <ul style="list-style-type: none"> <li>&gt; 1: String</li> <li>&gt; 2: Boolean</li> <li>&gt; 3: Integer</li> <li>&gt; 4: Long</li> <li>&gt; 5: Double</li> <li>&gt; 6: Date</li> </ul> <p>In pusher messages, the value for the parameter is always delivered as String and should be interpreted depending on the typeId of the parameter – a parameter of the type “Long” should only contain numeric values that can be converted to Long.</p> |
| <b>description</b> | Yes                    | The textual property description.   |
| <b>Position</b>    | Yes                    | <p>The position index for data with multiple entries</p> <ul style="list-style-type: none"> <li>&gt; -1 Single parameter</li> <li>&gt; [0-n] List parameter</li> </ul>  |
| <b>value</b>       | Yes                    | The string value of the game data parameter.  |

**Table 18 – Master Data – Game Data Attributes**

### 2.6.2 Country

| Attribute         | Mandatory?<br>(Yes/No) | Description                                      |
|-------------------|------------------------|--|
| <b>id</b>         | Yes                    | The unique ID of the country.                    |
| <b>name</b>       | Yes                    | The (English) name of the country.               |
| <b>isoName</b>    | Yes                    | The ISO country code (e.g. “AUT”, “USA”, “DEU”). |
| <b>changeTime</b> | Yes                    | The timestamp of the last update.                |

**Table 19 – Master Data – Country Attributes**

### 2.6.3 Competition

| Attribute              | Mandatory?<br>(Yes/No) | Description   |
|------------------------|------------------------|---|
| <b>Id</b>              | Yes                    | The unique ID of the competition.   |
| <b>sportsId</b>        | Yes                    | The sport (soccer, basketball, etc.) the league or competition refers to; see chapter 8.10 <i>Sports Mapping</i> for details. |
| <b>countryId</b>       | Yes                    | The country in which the competition takes place.   |
| <b>name</b>            | Yes                    | The official name of the competition.   |
| <b>regularPlaytime</b> | Yes                    | The length of a regular Game Period (a halftime, a quarter) of a game in the competition.                                     |

| Attribute                 | Mandatory?<br>(Yes/No) | Description  |
|---------------------------|------------------------|--|
| <b>overPlaytime</b>       | Yes                    | The length of an overtime of a game in the competition; 0 if there is no overtime.               |
| <b>hasPenaltyShootout</b> | Yes                    | Does the competition have a penalty shootout if there is a draw after regular playtime/overtime? |
| <b>changeTime</b>         | Yes                    | The timestamp of the last update.  |
| <b>hasPlayerData</b>      | Yes                    | If set to 'true', there is detailed player-related information provided for the competition.     |

**Table 20 – Master Data – Competition Attributes**

#### > League Parameters

League parameters are optional attributes of a competition that describe game mode details of a specific+ competition (e.g.: are NBA rules applied in a specific basketball game?).

| Attribute          | Mandatory?<br>(Yes/No) | Description  |
|--------------------|------------------------|--|
| <b>Id</b>          | Yes                    | The unique ID of the parameter.  |
| <b>typeId</b>      | Yes                    | <p>The data type of the parameter.</p> <ul style="list-style-type: none"> <li>&gt; 1.String</li> <li>&gt; 2.Boolean</li> <li>&gt; 3.Integer</li> <li>&gt; 4.Long</li> <li>&gt; 5.Double</li> <li>&gt; 6.Date</li> </ul> <p>In pusher messages, the value for the parameter is always delivered as String and should be interpreted depending on the typeId of the parameter – a parameter of the type “Long” should only contain numeric values that can be converted to Long.</p> |
| <b>description</b> | Yes                    | The textual description of the game data parameter.  |
| <b>value</b>       | Yes                    | The parameter value as string.   |

**Table 21 – Master Data – League Parameter Attributes**

#### 2.6.4 Venue

| Attribute         | Mandatory?<br>(Yes/No) | Description  |
|-------------------|------------------------|--|
| <b>Id</b>         | Yes                    | The unique ID of the venue.  |
| <b>sportsId</b>   | Yes                    | Is it a soccer/basketball/... venue? See chapter 8.10 <i>Sports Mapping</i> for details. |
| <b>name</b>       | Yes                    | The official name of the venue.  |
| <b>changeTime</b> | Yes                    | The timestamp of the last update.  |

**Table 22 – Master Data – Venue Attributes**

### 2.6.5 Competitor

| Attribute         | Mandatory?<br>(Yes/No) | Description  |
|-------------------|------------------------|--|
| <b>Id</b>         | Yes                    | The unique ID of the competitor.   |
| <b>sportsId</b>   | Yes                    | Is it a soccer/basketball/... competitor? (Described in chapter 8.10 <i>Sports Mapping</i> ) |
| <b>countryId</b>  | Yes                    | The country the competitor is from as described in chapter.                                  |
| <b>name</b>       | Yes                    | The official name of the competitor.   |
| <b>changeTime</b> | Yes                    | The timestamp of the last update.  |

Table 23 – Master Data – Competitor Attributes

### 2.6.6 Referee

| Attribute         | Mandatory?<br>(Yes/No) | Description   |
|-------------------|------------------------|---|
| <b>Id</b>         | Yes                    | The unique ID of the referee.   |
| <b>sportsId</b>   | Yes                    | Is it a soccer/basketball/...referee? (described in chapter 8.10 <i>Sports Mapping</i> ).   |
| <b>countryId</b>  | Yes                    | The country the referee is from (countries are described in chapter 2.6.6 <i>Referee</i> ). |
| <b>name</b>       | Yes                    | The name of the referee.  |
| <b>changeTime</b> | Yes                    | The timestamp of the last update.   |

Table 24 – Master Data – Referee Attributes

### 2.6.7 Scout

| Attribute                   | Mandatory?<br>(Yes/No) | Description  |
|-----------------------------|------------------------|--|
| <b>Id</b>                   | Yes                    | The unique ID of the Scout.                                  |
| <b>avgRating</b>            | Yes                    | The average rating of the Scout.                             |
| <b>last10GamesAvgRating</b> | Yes                    | The average rating of the Scout based on the last ten games. |
| <b>numOfGames</b>           | Yes                    | The overall number of games scouted by the Scout.            |

Table 25 – Master Data – Scout Attributes

### 2.6.8 Series

A number of consecutive games of two competitors, e.g. 'Best of N' matches or KO-rounds. Pre-game information is provided in a SeriesMatch (see chapter 2.6.9 *Series Match*).

| Attribute | Mandatory?<br>(Yes/No) | Description                  |
|-----------|------------------------|------------------------------|
| <b>Id</b> | Yes                    | The unique ID of the series. |

| Attribute              | Mandatory?<br>(Yes/No) | Description  |
|------------------------|------------------------|--|
| <b>numberOfMatches</b> | Yes                    | The number played in this series (=number of SeriesMatches entries).   |
| <b>team1Id</b>         | Yes                    | The id of competitor 1 (usually the home competitor in the first game of the series; teams/competitors are described in chapter 2.6.5 <i>Competitor</i> ). |
| <b>team2Id</b>         | Yes                    | The id of competitor 2 (usually the home competitor in the first game of the series; teams/competitors are described in chapter 2.6.5 <i>Competitor</i> ). |
| <b>winnerTeamID</b>    | No                     | The competitor that won the series; teams/competitors are described in chapter 2.6.5 <i>Competitor</i> .   |
| <b>score1</b>          | No                     | The aggregated score for competitor 1 in the series.   |
| <b>score2</b>          | No                     | The aggregated score for competitor 2 in the series.   |
| <b>standing1</b>       | No                     | The score in the series for competitor 1.  |
| <b>standing2</b>       | No                     | The score in the series for competitor 2.  |

**Table 26 – Master Data – Series Attributes**

#### 2.6.9 Series Match

| Attribute             | Mandatory?<br>(Yes/No) | Description   |
|-----------------------|------------------------|---|
| <b>seriesId</b>       | Yes                    | The ID of the series this match is played in.   |
| <b>Leg</b>            | Yes                    | The consecutive number of the game in the series (1 = the 1 <sup>st</sup> game etc.).   |
| <b>homeTeamId</b>     | Yes                    | The RunningBall teamID of competitor 1 in this SeriesMatch (teams/competitors are described in chapter 2.6.5 <i>Competitor</i> ).   |
| <b>foreignTeamId</b>  | Yes                    | The RunningBall teamID of competitor 2 in this SeriesMatch (teams/competitors are described in chapter 2.6.5 <i>Competitor</i> ).   |
|                       |                        | The current play game status. E.g.:<br><ul style="list-style-type: none"> <li>&gt; 1 Open</li> <li>&gt; 2 Finished</li> </ul>   |
| <b>playStateId</b>    | Yes                    | In case of an in-running cancellation the game status is set from Running to Finished. In such cases a System Message is sent (see 8.9 <i>System Message Mapping</i> for further details on system message mappings). |
| <b>seriesWinnerId</b> | No                     | Defines the status of this series<br><ul style="list-style-type: none"> <li>&gt; 1 Open</li> <li>&gt; 2 Finished</li> <li>&gt; 3 Draw</li> </ul>  |
| <b>sportsTickerId</b> | No                     | The reference to the RunningBall fixture (if available). Teams/competitors are described in chapter 2.6 <i>Master Data Events</i> ).  |
| <b>score1</b>         | No                     | The score for competitor 1 in this game.  |

| Attribute        | Mandatory?<br>(Yes/No) | Description                               |
|------------------|------------------------|---|
| <b>score2</b>    | No                     | The score for competitor 2 in this game.  |
| <b>standing1</b> | No                     | The score in the series for competitor 1. |
| <b>standing2</b> | No                     | The score in the series for competitor 2. |

**Table 27 – Master Data – SeriesMatch Attributes**

## 2.7 Player Attributes

Optionally, the RB feed provides information about players and their current team and team history. Player information events are used to provide updates through the feed. Due to the huge amount of data the base set of player data can be provided before the feed is activated.

| Attribute               | Mandatory?<br>(Yes/No) | Description  |
|-------------------------|------------------------|--|
| <b>id</b>               | Yes                    | The unique ID of the player  |
| <b>jerseyName</b>       | Yes                    | The name of the player, e.g.: "D. Maradona"  |
| <b>nationality</b>      | Yes                    | The nationality of the player (countryId)  |
| <b>playerPositionId</b> | Yes                    | The player's position (see chapter 8.11 <i>Player Position Mapping</i> for details)  |
| <b>teamPlayers</b>      | Yes                    | Information about the current team of the player <ul style="list-style-type: none"> <li>&gt; <b>TeamId</b>: The unique ID of the player's current team</li> <li>&gt; <b>playerRatingId</b>: See chapter 8.12 <i>Player Rating Mapping</i> for details</li> <li>&gt; <b>jerseyNumber</b>: The player's jersey number</li> </ul> |

**Table 28 – Master Data – Player Attributes**

## 2.8 Matrix of Supported Special Events

| Sport                   | BP | SUB | PR | SM | ST | GC | TC | KA | MD | PA | LU | PDC | GCC |
|-------------------------|----|-----|----|----|----|----|----|----|----|----|----|-----|-----|
| <b>Soccer</b>           | X  | X   | X  | X  | X  | X  | X  | X  | X  | X  | X  | X   |     |
| <b>Basketball</b>       |    |     | X  | X  |    | X  | X  | X  | X  | X  | X  |     |     |
| <b>Ice Hockey</b>       | X  |     | X  | X  |    | X  | X  | X  | X  |    |    |     |     |
| <b>Volleyball</b>       |    |     | X  | X  |    | X  | X  | X  | X  |    |    |     |     |
| <b>Beach Volleyball</b> |    |     |    | X  |    | X  | X  | X  | X  |    |    |     |     |
| <b>Handball</b>         |    |     | X  | X  |    | X  | X  | X  | X  |    |    |     |     |
| <b>Cricket</b>          |    |     |    | X  |    |    |    | X  | X  |    |    |     | X   |

| Sport           | BP | SUB | PR | SM | ST | GC | TC | KA | MD | PA | LU | PDC | GCC |
|-----------------|----|-----|----|----|----|----|----|----|----|----|----|-----|-----|
| <b>Baseball</b> |    | X   | X  | X  |    |    |    | X  | X  | X  | X  |     |     |

**Table 29 – Event Type Support Matrix**

|                                     |                                |
|-------------------------------------|--------------------------------|
| <b>Key:</b>                         |                                |
| BP – Ball Position Event            | SUB – Substitution Event       |
| PR – Player-Related Event           | SM – System Message Event      |
| ST – Stoppage Time Event            | GC – Game Condition Event      |
| TC – Time Correction Event          | KA – Keepalive Event           |
| MD – Master Data Event              | PA – Player Attributes Event   |
| LU – Line-up Event                  | PDC – Player Data Confirmation |
| GCC – Game Conditions Changed Event |                                |

# 3 Data Feed Interfaces

## 3.1 Connection-Based

### 3.1.1 Database Feed (MSSQL, MySQL or Oracle)

The feed pusher currently supports the following database types:

- > MS SQL 2005 and above.
- > MySQL from version 5.0.17 (users need to have root privileges for database procedures setup).
- > Oracle from version 10.

In database feeds, a JDBC connection is used to access the database server set-up with a feed-specific scheme. This scheme also contains a trigger that can update game statistics when the individual events are entered. The game statistics are continuously updated. The feeding system caches unsent data in case of a connection loss and tries to reconnect periodically. If the connection can be re-established, the cached data is resent. It is also possible to configure an emergency notification contact. Then a notification email is send to you in case of a connection failure.

The figure below shows the general database feed architecture.

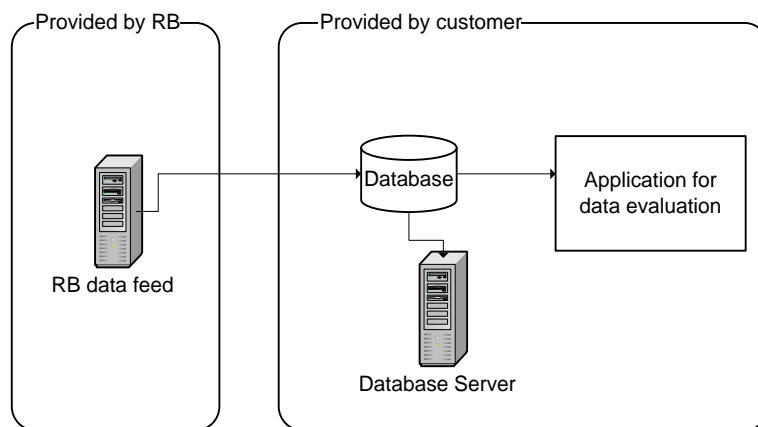
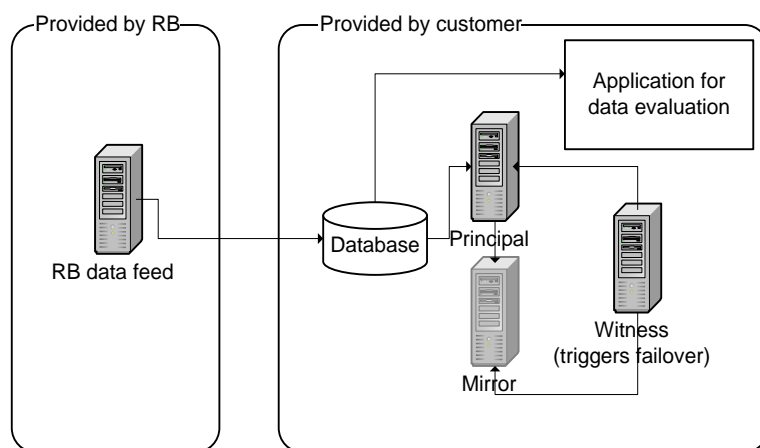


Figure 1 – General Database Architecture

If the Microsoft SQL Server DB is used, there is the possibility to set up a database mirror. This provides higher availability in case of a hardware failure.



**Figure 2 – MSSQL Architecture with a Database Mirror**

### 3.1.2 Stream Connections Implementing the TCP Text or XML via a TCP Feed

If no database can be provided, one of two different application interfaces can be used to connect to the feed. The main difference to the database feed is that a client application following the feed interface specification must establish a stream connection to a socket server provided by the feed.

The basis for one piece of information (a request or a response) of both TCP stream connections is one line. This is important when you want to interpret the information correctly. A request is a part of information sent from your client to our feed. A response is a part of information sent from our feed to your client.

RB provides a hostname/port and a default number of user accounts (5) for access to the TCP feed.

**Clients should implement the following behaviour:**

- > Handle synchronous and asynchronous messages properly: wait for responses and consume asynchronous messages ('live events').
- > Handle documented response codes, such as 'login failed', 'already booked'.
- > Automatically recover from connection issues (reconnection intervals of 1-5 seconds).
- > Usage of API commands to restore sessions (register matches, fetch missed events).
- > Provided user accounts can only be used for one network session. Existing sessions will automatically be disconnected by the server if shared between clients (login attempt "looping").

**Note:** RB might temporarily disable accounts not complying with the criteria listed above (especially in case of a high amount of "login" counts or other API calls which clearly show misbehaviour of the component on the partner's side).



> Request Line Breaks:

| Name                               | Character | Hex       | Decimal |
|------------------------------------|-----------|-----------|---------|
| <b>Line feed</b>                   | \n        | 0x0A      | 10      |
| <b>Carriage return + line feed</b> | \r\n      | 0x0D 0x0A | 10 13   |
| <b>Carriage return</b>             | \r        | 0x0D      | 13      |

Table 30 – Request Line Breaks

> Response Line Breaks:

| Name             | Character | Hex  | Decimal |
|------------------|-----------|------|---------|
| <b>Line feed</b> | \n        | 0x0A | 10      |

Table 31 – Response Line Break

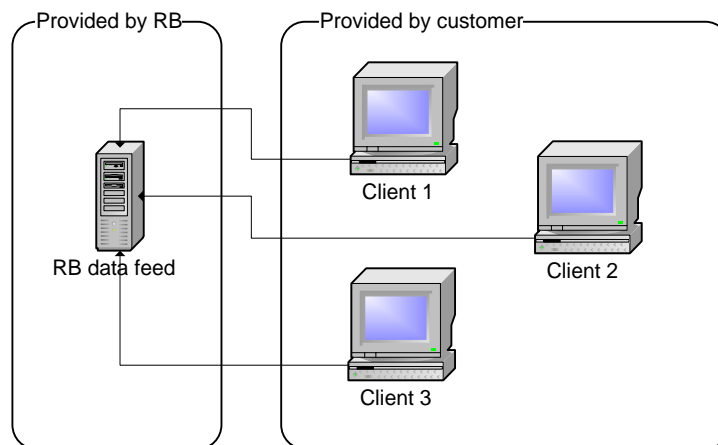


Figure 3 – Stream Connection Architecture

## 3.2 Connectionless

### 3.2.1 Http XML Web Post Feed

The RB data feed calls an URL on the receiving end point (the server managed by the customer) by posting XML data into the parameter called "rb\_data". For an existing web application this is probably the easiest way to integrate the data feed into the system. Http as well as https are supported.

Messages sent by the Http feed must always be confirmed by returning HTTP\_OK (200). For 'unconfirmed' messages the delivery is repeated, and preceding messages are queued up.

In case of endpoint outages or protocol errors, up to 50000 messages are held in an output queue.

Therefore, the http endpoint must accept every POST call to consume messages properly and to avoid 'queuing' in regular cases:

- > Successful delivery.
- > Messages of ignored fixtures.
- > "Duplicated" events: If a message was sent to the server, but no response (or a protocol error) is returned, the same message ('event') is sent again until it is confirmed by HTTP\_OK (200).

**Note:** This could lead to an endless loop if it is not handled properly and no new messages will be delivered.

The default timeout of POST calls is 10 seconds. The used encoding is the UTF-8 xml standard encoding.

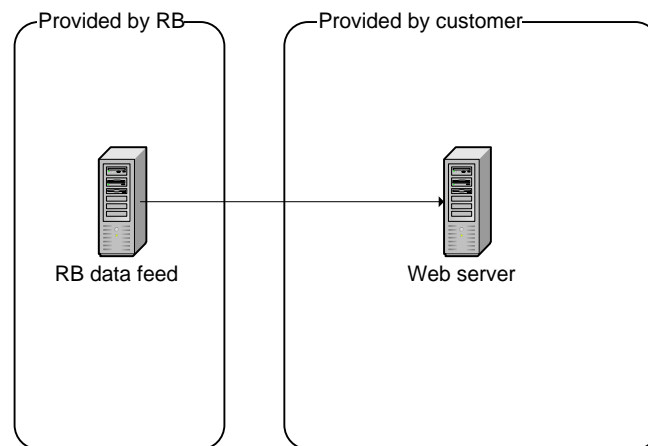


Figure 4 – XML Post Feed Architecture

## 4 Game Selection (Booking)

There are three methods available to book games: auto booking, pre-booking and manual booking.

### 4.1 Auto Booking

All offered games are automatically booked for the feed.

### 4.2 Pre-booking

All games of the respective competition are automatically transferred to the feed. Additionally, it can be defined that only games that start during a specific time frame are transferred.

#### *Example:*

The UEFA Champions League and timeframe from 2 pm until 8 pm is chosen. Then, all available UEFA Champions League games that start between 2 pm and 8 pm will be transmitted. Besides that, games from other leagues or competitions can always be manually booked in the Trader Client.

### 4.3 Manual Booking

All games to be transferred must be selected manually using the Trader Client, the http pull interface, or the Socket Client if the integration method TCP has been chosen.

# 5 Interface Description

## 5.1 Database

The database scheme provided by RunningBall contains the tables listed below as well as a trigger for statistical values that are updated in-running.

### 5.1.1 Master Data

Database feeds provide information about the “master data” of games, such as competitors, competitions or countries.

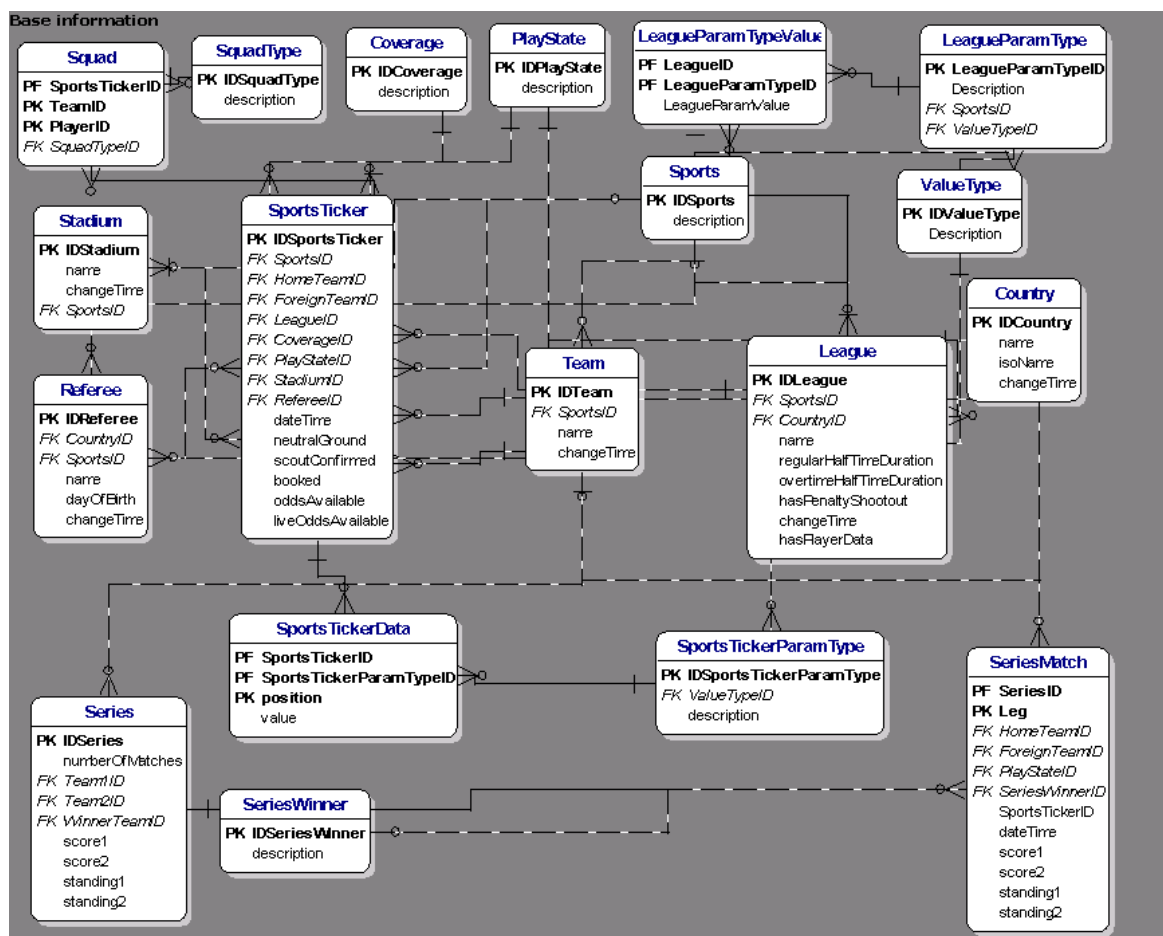


Figure 5 – XML Post Feed Architecture

| Table            | Description   |
|------------------|---|
| <b>Coverage</b>  | Defines whether or not the game is TV Game or a Live Game.    |
| <b>PlayState</b> | The Game Status; see chapter 8.4 <i>Game Status Mapping</i> . |
| <b>Sports</b>    | All sports that are available for you.                        |

| Table                        | Description  |
|------------------------------|--|
| <b>SportsTicker</b>          | Information about a single game <ul style="list-style-type: none"> <li>&gt; Game start time</li> <li>&gt; Game Status</li> <li>&gt; Competitor</li> <li>&gt; Venue</li> <li>&gt; Etc.</li> </ul>   |
| <b>Stadium</b>               | Venue name mappings  |
| <b>Teams</b>                 | Competitor name mappings   |
| <b>Country</b>               | Country name mappings  |
| <b>League</b>                | Information about the competition (name, game settings, country & sport)   |
| <b>LeagueParamType</b>       | Look-up table for all possible league parameter types (including the textual description and sports mappings)  |
| <b>ValueType</b>             | Look-up table for all possible league parameter values (string, long, date, ...)   |
| <b>LeagueParamType Value</b> | Parameter value mappings for competitions.   |
| <b>Squad</b>                 | If the competition provides player information and the 'Line-up changed' (ID520) event was sent initially, the teams' line-ups will be shown in this table. <ul style="list-style-type: none"> <li>&gt; Team</li> <li>&gt; Player</li> <li>&gt; Squad: Starting 11, Bench, Suspended...</li> </ul> <p>The 'SquadTypeId' indicates if a team's player is in the 'Starting eleven' or on the 'Bench' in this game.</p> |
| <b>SquadType</b>             | Look-up table for 'SquadTypeId' in the 'Squad' table.<br>See chapter 8.14 <i>Squad Type Mapping</i> .  |
| <b>Referee</b>               | Basic information about the referee of the game (name, country).   |
| <b>SportsTickerData</b>      | Lookup table for all possible game data parameters.  |
| <b>SportsTickerParamType</b> | SportsTicker data entries of a single game (per SportsTickerID).   |
| <b>Series</b>                | Defines a series of consecutive matches played between two competitors.<br>See chapter 2.6.8 <i>Series</i> .   |
| <b>SeriesMatch</b>           | Defines a single game played in a series, e.g. 'Best of N'.<br><br>Note: The <i>SeriesMatch.SportsTickerID</i> fixture reference column has no foreign key constraint to the <i>SportsTicker</i> table defined by design, because there might be further games (SeriesMatch) in the series that are not yet entered (no SportsTicker entry available yet).<br>See chapter 2.6.9 <i>Series Match</i> .                |
| <b>HomeAdvantage</b>         | The competitor with home advantage; see chapter 8.5 <i>Home Advantage Mapping</i> for further details.   |

Table 32 – Data Base Master Data – Tables

### 5.1.2 Game Events and Statistics

The following scheme describes how game events as specified in chapter 2.3 Standard Game Events are mapped to the database:

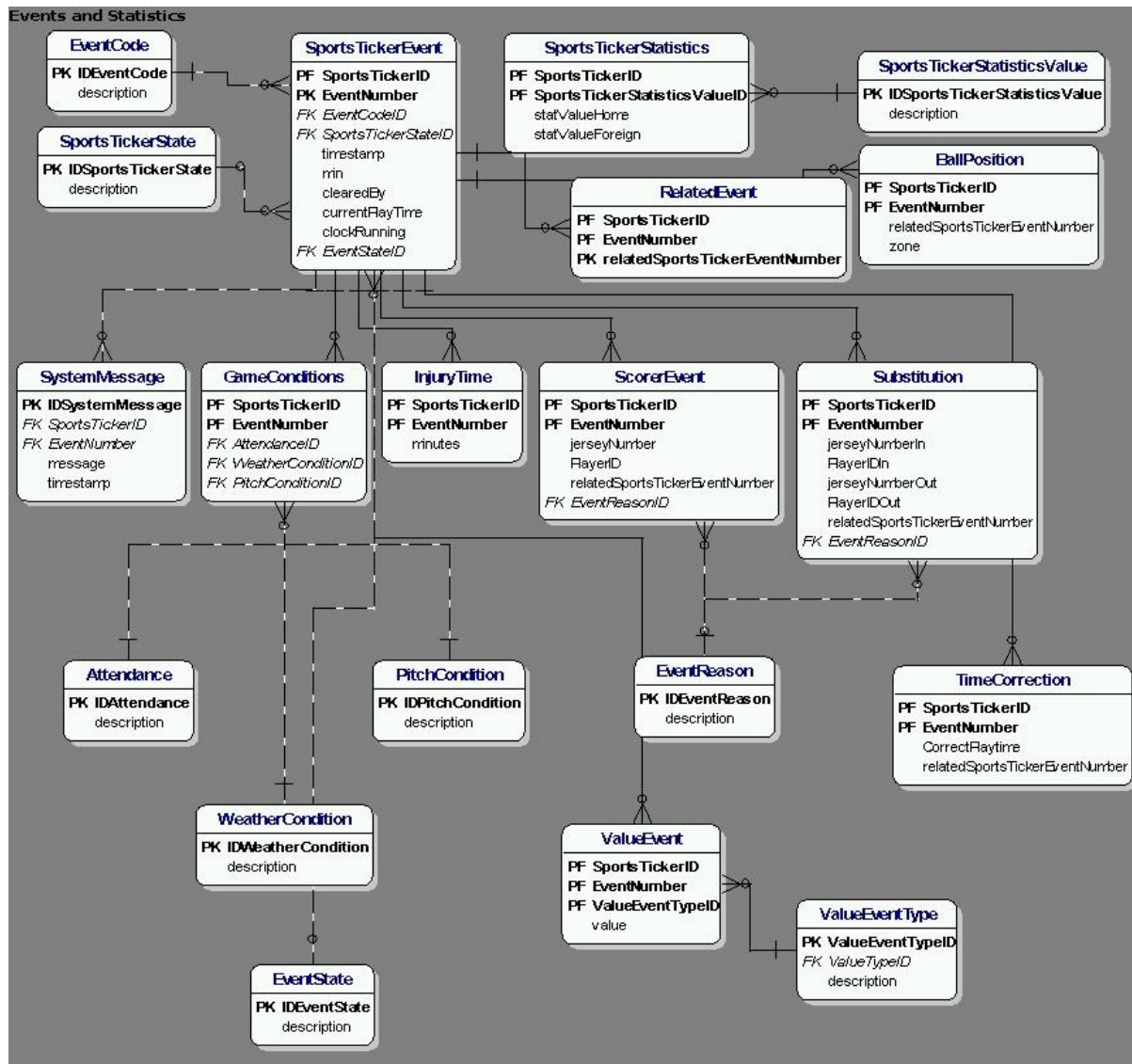


Figure 6 – Game Events and Statistics

| Table                              | Description  |
|------------------------------------|--|
| <b>EventCode</b>                   | Look-up table for event codes associated with game events<br>For a detailed description, see chapter 8.1 <i>Event Code Mapping</i> .     |
| <b>SportsTickerState</b>           | Look-up table for game states associated with game events.<br>For a detailed description, see chapter 8.3 <i>Ticker State Handling</i> . |
| <b>SportsTickerEvent</b>           | Game events as described in chapter 8.2 <i>Event Reason Mapping</i> .  |
| <b>SportsTickerStatistics</b>      | Statistical information about a game; multiple statistical values (goals, cards, free throws) of every game are provided.                |
| <b>SportsTickerStatisticsValue</b> | Describes a single statistical value (goals, cards).   |

| Table                    | Description  |
|--------------------------|--|
| <b>BallPosition</b>      | Additional information regarding ball position events. The sports-specific zone code is stored in the zone column. See also chapter 8.17 <i>Ball Position Mappings</i> .   |
| <b>GameConditions</b>    | Additional information regarding game condition events. GameConditions refers to Attendance, PitchCondition and WeatherConditions. See also chapter 2.4.7 <i>Game Condition Event</i> .  |
| <b>InjuryTime</b>        | Additional information regarding injury time events; see also chapter 2.4.6 <i>Stoppage Time Event</i> .   |
| <b>ScorerEvent</b>       | Additional information regarding scoring events; see also chapter 2.4.4 <i>Player-Related Events</i> .   |
| <b>Substitution</b>      | Additional information regarding substitution events. See also chapter 2.4.2 <i>Substitution Event</i> . The optional attributes relatedSportsTickerEventNumber and eventReasonID are only used for substitution update events (ID283). See also chapter 2.4.2 <i>Substitution Event</i> . |
| <b>SystemMessage</b>     | Additional information regarding system message events. See also chapter 2.4.5 <i>System Message Event</i> .   |
| <b>TimeCorrection</b>    | Additional information for time correction events. See also chapter 2.4.8 <i>Generic Game Conditions Changed Event</i> .   |
| <b>Attendance</b>        | Look-up table for information about the attendance (used in the game condition event). See also chapter 2.4.7 <i>Game Condition Event</i> .  |
| <b>PitchCondition</b>    | Look-up table for information about the pitch condition (used in the game condition event); see also chapter 2.4.7 <i>Game Condition Event</i> .   |
| <b>WeatherConditions</b> | Look-up table for information about the weather conditions (used in the game condition event). See also chapter 2.4.7 <i>Game Condition Event</i> .  |
| <b>ValueEvent</b>        | A single event parameter, referred to via [SportsTickerID,EventNumber].  |
| <b>ValueEventType</b>    | The description of possible value event parameters. "ValueTypeID" refers to the "ValueType" table that is used as a look-up for "LeagueParameters".  |
| <b>RelatedEvent</b>      | The event relation mapping table for events referring to other events, e.g. Cancel Goal Home, ...  |

**Table 33 – Data Base Game Event and Statistical Tables**

### 5.1.3 Market Price (Deprecated)

Detailed information about market prices/odds messages:

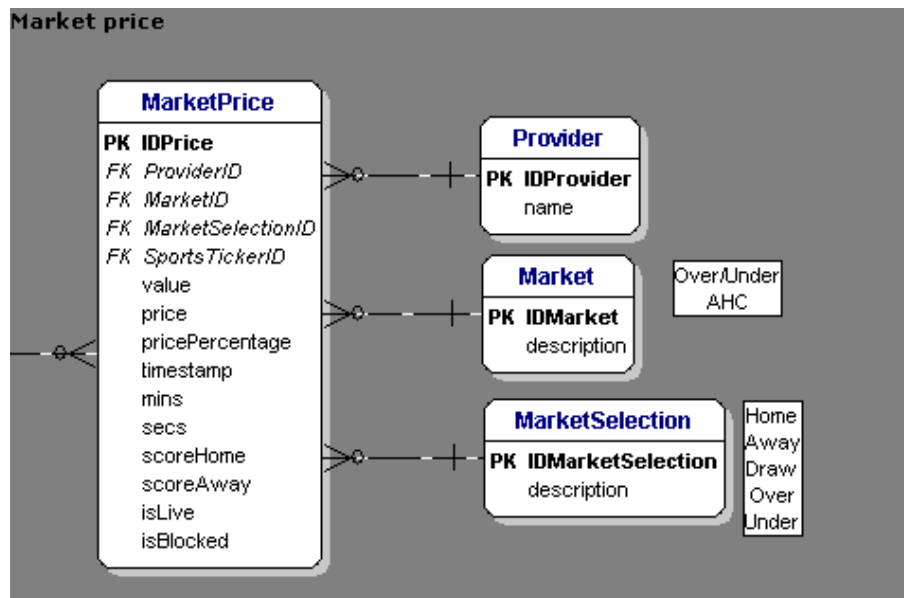


Figure 7 – Market Price Event

| Table               | Description   |
|---------------------|---|
| <b>MarketPrice</b>  | Information regarding the odds of the game.                         |
| <b>Provider</b>     | Look-up table for market price/odds providers.                      |
| <b>Market</b>       | Look-up table for available markets (e.g. "1X", "Over/Under", ...). |
| <b>SportsTicker</b> | Look-up table for available market selections.                      |

Table 34 – Data Base Market Price Tables

#### 5.1.4 Player Information

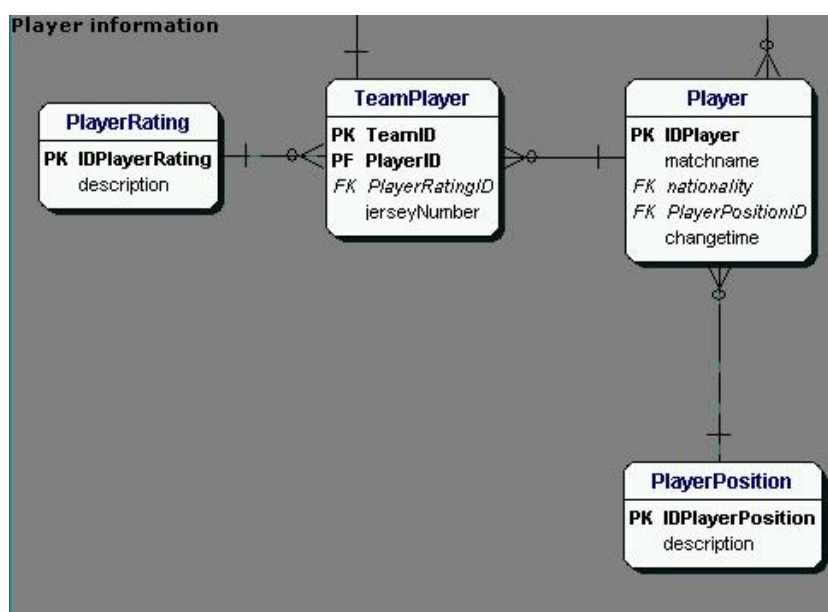


Figure 8 – Player Information



| Table                 | Description  |
|-----------------------|--|
| <b>Player</b>         | Player data.   |
| <b>TeamPlayer</b>     | Player-team relation.  |
| <b>PlayerRating</b>   | Look-up table for players' ratings; see chapter 8.12 <i>Player Rating Mapping</i> for detailed information. Currently, there is no data available. |
| <b>PlayerPosition</b> | Look-up table for players' position; see chapter 8.11 <i>Player Position Mapping</i> for detailed information.                                     |
| <b>Team</b>           | Competitor name mappings.  |
| <b>Nationality</b>    | Country name mappings.   |

**Table 35 – Data Base – Player Tables**

### 5.1.5 Keep Alive Event



**Figure 9 – Administrative Tables**

# 6 Stream Connections

## 6.1 General Information

"XML over TCP" and "TCP text" use the same functionality that is described below. For the detailed protocol description of each of the two implementations please refer to chapters 6.2 *TCP XML Protocol Details* and 6.3 *TCP Text Protocol Details*.

Stream connections offer a set of synchronous commands and asynchronous event messages.

**Note:** All features except client "keep alive" (FeatureID =1, see chapter 6.2.1 *Keep Alive from the Client*) and timestamp requests (FeatureID =5) require to be logged in with valid user data (username/password).

Only one active session per user is allowed at a time, the current session will be disconnected if credentials are used on multiple connections/clients.

### 6.1.1 Connection

The connection is set up via a TCP socket, optionally secured by SSL encryption. Please see chapter 3.1.2 *Stream Connections Implementing the TCP Text or XML via a TCP* for correct line breaks.

### 6.1.2 Game Registration

#### > Automatic registration

All booked games are automatically available in each client (please see chapter 4 *Game Selection (Booking)* for game booking). This means that the set of possible games to receive data from is the same for all clients and they do not have to explicitly register games.

#### > Manual registration

Every single client has to select the games he/she is interested in. Different game sets can be processed by different clients. The game set for a client is only valid for one session. This means that the games have to be selected again if there is a connection loss and the client does a re-login.

### 6.1.3 Feature Matrix

| Feat. ID | Name                      | Description  | XML TCP – Information | TCP Text – Information |
|----------|---------------------------|--|-----------------------|------------------------|
| 1        | Keepalive from the client | Keepalive that the client sends to the server; the server disconnects the client in case of a timeout; interval 5 seconds. | <a href="#">Link</a>  | <a href="#">Link</a>   |

| Feat. ID  | Name                                | Description   | XML TCP – Information | TCP Text – Information |
|-----------|-------------------------------------|---|-----------------------|------------------------|
| <b>2</b>  | Keepalive from the server           | Keepalive that the server sends to the client; the client should reconnect in case of a timeout; interval 5 seconds.  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>3</b>  | Login - Request                     | Login request by the client.  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>4</b>  | Login - Response                    | The answer to the login request with a status (OK or wrong username or wrong password).   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>5</b>  | Timestamp - Request                 | Requests the server's timestamp for client-server time synchronisation.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>6</b>  | Timestamp - Response                | The server's timestamp.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>7</b>  | Game Clock - Request                | Requests the game clock of a particular running game.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>8</b>  | Game Clock - Response               | The game clock.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>9</b>  | Feedback - Request                  | Used to provide us with feedback about a particular game if you detect wrong data.  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>10</b> | Feedback - Response                 | The server's answer (OK or non-existing game).  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>11</b> | Game List - Request                 | Requests a list of games; normally you get all games from now minus 24 hours until 14 days in the future; if you supply a dateTo you get all games from now minus 24 hours until dateTo; if you supply a dateFrom and a dateTo you get all games in that timeframe. | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>12</b> | Game List - Response                | The answer to the game list request consisting of a list of games   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>13</b> | Register Game - Request             | Assign for a game you want to be informed about   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>14</b> | Register Game - Response            | The answer (OK, or error)   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>15</b> | Retrieve Registered Game - Request  | Register a game to get information about it   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>16</b> | Retrieve Registered Game - Response | Requests the list of currently registered games.  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>17</b> | Re-Send Game - Request 1            | Requests that game event and market price data (deprecated) of a particular game (starting from the event number you supply until the most recent event available) is re-sent to you. Re-Send cannot be called for games that are not registered!                   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| <b>18</b> | Re-Send Game - Request 2            | Requests that game event and market price data (deprecated) of a list of games in a given timespan is re-sent to you. Re-send cannot be called for games that are not registered!   | <a href="#">Link</a>  | <a href="#">Link</a>   |

| Feat. ID | Name                       | Description  | XML TCP – Information | TCP Text – Information |
|----------|----------------------------|--|-----------------------|------------------------|
| 19       | Re-Send Game - Response    | A list of events (23) followed by a list of market prices (deprecated) (22) or a piece of information if there are no events or market prices. | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 20       | Unregister Game - Request  | Unregistering a game causes the server to stop sending you data to this game.  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 21       | Unregister Game - Response | The answer to the unregister request (OK or error).  | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 22       | Market Price Event         | One market price event (deprecated).   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 23       | Sports Ticker Event        | One sports ticker event.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 24       | Book Game - Request        | Requests to book a game.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 25       | Book Game - Response       | Answer to the book game request (OK or error).   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 26       | Unbook Game - Request      | Requests to “unbook” a game.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 27       | Unbook Game - Response     | Answer to the unbook game request (OK or error).   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 28       | Logout                     | Causes the client’s logout (closing of the socket), no response.   | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 29       | System Message             | Game-related message that provides the customers with additional information about unforeseen happenings.                                      | <a href="#">Link</a>  | <a href="#">Link</a>   |
| 30       | Game Conditions            | Game condition containing attendance and - depending on the sport - weather and pitch conditions.  | <a href="#">Link</a>  | <a href="#">Link</a>   |

**Table 36 – Feature Matrix**

## 6.2 TCP XML Protocol Details

Each XML object is put into one line by the server, e.g. all line breaks of xml are omitted. Here in this documentation line breaks and tab stops were added in case of longer XML examples to improve readability. For easier readability the XML types are described by example, XSD definitions can be provided on request.

### 6.2.1 Keep Alive from the Client

```
<client_keep_alive timestamp="1271934950109" />
```

### 6.2.2 Keep Alive from the Server

```
<keep_alive timestamp="1271934512159" />
```

### 6.2.3 Login – Request

```
<login timestamp="1271934438078" bookmakerid="username" key="password" />
```

### 6.2.4 Login – Response

```
<login status="loginok" timestamp="1271934432053" />
```

Possible values for status: loginok, loginfailed

**Note:** "loginfailed" is also sent if the client tries to execute any other function without being logged in.

### 6.2.5 Timestamp – Request

```
<timestamp_request />
```

### 6.2.6 Timestamp – Response

```
<timestamp_response timestamp="1271935385513" />
```

### 6.2.7 Game Clock – Request

```
<match_clock_request timestamp="1184145289891" matchid="117655" />
```

### 6.2.8 Game Clock – Response

```
<match_clock_response is_ticking="T" matchid="137541" minute="23" second="10" timestamp="1294397689570" status="ok" />
```

### 6.2.9 Feedback – Request

```
<feedback_request timestamp="1184145289891" matchid="117655" text="The red card for team home was entered 30 seconds late" is_scout_related="true" />
```

### 6.2.10 Feedback – Response

```
<feedback_response matchid="117655" timestamp="1271935938250" status="feedback_ok" />
```

Possible values for status: feedback\_ok, feedback\_error

### 6.2.11 Game List – Request

```
<match_list_request timestamp="1184145289891" date_from="1184145289891" date_to="1184146289891" />
```

## 6.2.12 Game List – Response

```
<match_list timestamp="1423559145275" status="meta2"
xmlns="http://rball.com/eventpusher/data/xmltcpbeans">
  <match matchid="503291" timestamp="1423924200000" team1="SV Werder Bremen"
team1_id="1187" team2="FC Augsburg" team2_id="108" league="Bundesliga"
league_id="130" country1="Germany" country1_id="0" country2="Germany"
country2_id="0" neutralvenue="false" stadium="Weser Stadion" stadium_id="398"
coverage="LIVE" coverage_id="0" playstate="Open" playstate_id="0"
scout_confirmed="true" league_country="Germany" league_country_id="0" booked="true"
sportid="1" sportname="Soccer" oddsAvailable="false" liveOddsAvailable="false"
homeAdvantageId="1" homeAdvantage="competitor 1" league_halftime_duration="45"
league_overtime_duration="0" league_has_penalty_shootout="false"
league_has_player_data="true" scout_id="11587" scout_num_games="106"
scout_avg_rating="1.056603" scout_last10_avg_rating="1.0"/>
  <match matchid="502307" timestamp="1423530000000" team1="Milwaukee Bucks"
team1_id="9813" team2="Brooklyn Nets" team2_id="9805" league="NBA"
league_id="1120" country1="USA" country1_id="9" country2="USA" country2_id="9"
neutralvenue="false" stadium="BMO Harris Bradley Center" stadium_id="5971"
coverage="LIVE" coverage_id="0" playstate="Open" playstate_id="0"
scout_confirmed="true" league_country="USA" league_country_id="9" booked="false"
sportid="2" sportname="Basketball" oddsAvailable="false" liveOddsAvailable="false"
homeAdvantageId="1" homeAdvantage="competitor 1" league_halftime_duration="12"
league_overtime_duration="5" league_has_penalty_shootout="false"
league_has_player_data="false" leagueParameters="5=false 4=true" scout_id="317"
scout_num_games="2596" scout_avg_rating="2.457241"
scout_last10_avg_rating="3.0"/>
  <match matchid="502632" timestamp="1423845000000" team1="Oulun
K&#228;rp&#228;t" team1_id="16082" team2="Tappara" team2_id="16348"
league="SM-liiga" league_id="2377" country1="Finland" country1_id="27"
country2="Finland" country2_id="27" neutralvenue="false" stadium="Oulun Energia
Areena" stadium_id="9169" coverage="LIVE" coverage_id="0" playstate="Open"
playstate_id="0" scout_confirmed="false" league_country="Finland"
league_country_id="27" booked="true" sportid="8" sportname="Ice Hockey"
oddsAvailable="false" liveOddsAvailable="false" homeAdvantageId="1"
homeAdvantage="competitor 1" league_halftime_duration="20"
league_overtime_duration="5" league_has_penalty_shootout="true"
league_has_player_data="true" scout_id="3859" scout_num_games="324"
scout_avg_rating="1.12037" scout_last10_avg_rating="1.4"/>
</match_list>
```

Game lists can also be sent as an asynchronous message if new or updated game data is provided. Asynchronous game lists have an additional attribute (replytype) in order to avoid message handling issues if an update is sent while waiting for a GameListResponse.

```
<match matchid="501408" timestamp="1423398600000" team1="Eintracht
Braunschweig" team1_id="1211" team2="1. FC Kaiserslautern" team2_id="763"
league="2. Bundesliga" league_id="111" country1="Germany" country1_id="0"
country2="Germany" country2_id="0" neutralvenue="false" stadium="Eintracht Stadion"
stadium_id="400" coverage="LIVE" coverage_id="0" playstate="Open" playstate_id="0"
scout_confirmed="true" league_country="Germany" league_country_id="0" booked="true"
sportid="1" sportname="Soccer" oddsAvailable="false" liveOddsAvailable="false"
homeAdvantageId="1" homeAdvantage="competitor 1" league_halftime_duration="45"
league_overtime_duration="0" league_has_penalty_shootout="false"
league_has_player_data="true" referee="F. Zwayer" referee_id="2111"
referee_country_id="52" referee_country="World" scout_id="14402"
scout_num_games="59" scout_avg_rating="1.084745" scout_last10_avg_rating="1.0"/>
```

</match\_list>

#### Game Series:

```
<match matchid="414944" timestamp="1399740300000" team1="Vitesse Arnhem"
  team1_id="1125" team2="FC Groningen" team2_id="871" league="Eredivisie"
  league_id="101" country1="Netherlands" country1_id="4"
  country2="Netherlands" country2_id="4" neutralvenue="false" stadium="GelreDome"
  stadium_id="488" coverage="LIVE"
  coverage_id="0" playstate="Open" playstate_id="0" scout_confirmed="true"
  league_country="Netherlands" league_country_id="4" booked="false" sportid="1"
  sportname="Soccer" oddsAvailable="false" liveOddsAvailable="false"
  league_halftime_duration="45" league_overtime_duration="0"
  league_has_penalty_shootout="false" league_has_player_data="true" referee="P.
  Vink" referee_id="2196" referee_country_id="52" referee_country="World">
  <series num_of_matches="2" team1_id="871" team2_id="1125" score_team1="1"
    score_team2="0">
    <seriesMatch leg="1" date="2014-05-06T16:45:00.000Z" team1_id="871"
      team2_id="1125" playstate_id="1" playstate="Finished"
      match_id="414943" winner_id="1" winner="Home Competitor"
      score_team1="1" score_team2="0"/>
    <seriesMatch leg="2" date="2014-05-10T16:45:00.000Z" team1_id="1125"
      team2_id="871" playstate_id="0" playstate="Open"
      match_id="414944"/>
  </series>
</match>
```

#### 6.2.13 Register Game – Request

```
<register_match_request timestamp="1184145289891" matchid="117655" />
```

#### 6.2.14 Register Game – Response

```
<register_match_response matchid="117655" status="register_ok"
timestamp="1271935583943" />
```

Possible values for status: register\_ok, not\_booked, already\_registered, error

#### 6.2.15 Retrieve Registered Game – Request

```
<registered_matches_request />
```

#### 6.2.16 Retrieve Registered Game – Response

```
<registered_matches_response timestamp="1271935471155" matchids="117276 116760
116950 116887 117655" />
```

#### 6.2.17 Re-Send Game – Request 1

```
<resend_request timestamp="1184145289891" matchid="117655" sequenceid="40" />
```

### 6.2.18 Re-Send Game – Request 2

```
<BookmakerStatus type="error" timestamp="1271936350608"
dateFrom="1171936350608" dateTo="1271936350608">
<Match matchid="117655" />
<Match matchid="65499" />
</BookmakerStatus>
```

### 6.2.19 Re-Send Game – Response

An event list as described in chapter 2.6 Master Data Events and a market price list (deprecated) as described in chapter 5.1.3 Market Price (Deprecated) are sent in response. Please note that the attribute replytype is set to error in both cases so that you can categorise these events as events that were not sent live, but as answers to a Re-Send request. If the event is a System Message (code 513), an additional System Message as described in chapter 6.2.30 Game Conditions is sent. If the event is a Game Condition (code 258), an additional Game Condition (see chapter 6.3.30 Game Conditions) is sent.

There are two possible error responses:

```
<BookmakerStatus type="no_events" timestamp="1184145289891" status="error" />
<BookmakerStatus type="no_odds" timestamp="1184145289891" status="error" />
```

### 6.2.20 Unregister Game – Request

```
<unregister_match_request timestamp="1184145289891" matchid="117655" />
```

### 6.2.21 Unregister Game – Response

```
<unregister_match_response matchid="117655" timestamp="1271935734916"
status="unregister_ok" />
```

### 6.2.22 Market Price Event (Deprecated)

```
<market_price_list status="price_list" timestamp="1271936350629">
  <market_price matchid="117655" id="0" provider_id="327"
    provider="providerUrl" market_id="22" market="Next goal HT1"
    selection_id="3" selection="X" value="0.0" price="3.164" pp="0.0"
    date="2010-04-22T10:12:06.107Z" min="0" sec="0" hs="0" as="0" live="1"
    blocked="0" />
</market_price_list>
```

### 6.2.23 Game Event

#### > Standard Game Event

```
<event_list status="event" timestamp="1294215296267">
  <event matchid="137499" event_number="2" event_code_id="1024"
    event_code="Attack Home" timestamp="1294214542186" minute="4"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    statistics="2048=0 2050=0 2053=0 1024=1 1026=1 1029=0"
```



```

        currentPlaytime="182556" clockRunning="true"/>
</event_list>

```

#### > Ball Position Event

```

<event_list status="event" timestamp="1294215424745">
  <event matchid="137499" event_number="8" event_code_id="1027"
    event_code="Dangerous Free kick Home" timestamp="1294214673306"
    minute="6" tickerstate="1st half" tickerstateid="2" score_home="0"
    score_away="0"
  <event matchid="137499" event_number="9" event_code_id="262"
    event_code="Zone information" timestamp="1294214673306" minute="6"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    zone="FK4" team_id="0" related_events="6" related_event_codes="1028"
    statistics="2051=0 1027=1" currentPlaytime="313675"
    clockRunning="true"/>
</event_list>

```

#### > Substitution Event

```

<event_list status="event" timestamp="1328688232434">
  <event matchid="184564" event_number="5" event_code_id="1055"
    event_code="Substitution Home" timestamp="1328688232562" minute="3"

    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    player_in_num="24" player_out_num="37" player_in_id="3502"
    player_out_id="57619" player_in_name="P. Vieira"
    player_out_name="Gunnar Nielsen" statistics="1055=1 2079=0"
    currentPlaytime="129334" clockRunning="true"/>
</event_list>

```

#### > Substitution Update Event

```

<event_list status="event" timestamp="1370873723744">
  <event matchid="123456" event_number="1" event_code_id="1055"
    event_code="Substitution Home" timestamp="1370873723533" minute="85"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    player_in_num="23" player_out_num="7" player_in_id="12345"
    player_out_id="54321" currentPlaytime="1740000" clockRunning="true"/>
  <event matchid="123456" event_number="2" event_code_id="283"
    event_code="Substitution details for Substitution in the 85. minute changed"
    timestamp="1370873723533" minute="85" tickerstate="1st half"
    tickerstateid="2" score_home="0" score_away="0" player_in_num="16"
    player_out_num="7" player_in_id="11111" player_out_id="54321"
    related_events="1" event_reason_id="20" event_reason="injury"
    currentPlaytime="1740000" clockRunning="true"/>
</event_list>

```

#### > Player-Related Event

```

<event_list status="event" timestamp="1328688111364">
  <event matchid="184564" event_number="3" event_code_id="1029"
    event_code="Goal Home" timestamp="1328688111573" minute="1"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    statistics="2053=0 1029=1" currentPlaytime="8346"
    clockRunning="true"/>
  <event matchid="184564" event_number="4" event_code_id="261"

```

```

    event_code="Event details for Goal in the 1. minute changed"
    timestamp="1328688135506" minute="1" tickerstate="1st
    half" tickerstateid="2" score_home="1" score_away="0"
    player_id="13169" player_num="45" player_name="Mario Balotelli"
    event_reason="shot" event_reason_id="0" related_events="3"
    related_event_codes="1029" currentPlaytime="32279"
    clockRunning="true"/>
</event_list>

```

#### > Stoppage Time Event

```

<event_list status="event" timestamp="1291636394752">
  <event matchid="136807" event_number="22" event_code_id="260"
    event_code="Stoppage time" timestamp="1291635780621" minute="23"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="1"
    stoppage_time="3" currentPlaytime="1371463" clockRunning="true"/>
</event_list>

```

#### > Cancellation & Clear Event

```

<event_list status="event" timestamp="1294216440344">
  <event matchid="137527" event_number="11" event_code_id="1024"
    event_code="Attack Home" timestamp="1294215688874" minute="4"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    statistics="2048=0 1024=2" currentPlaytime="226461"
    clockRunning="true"/>
  <event matchid="137527" event_number="12" event_code_id="256"
    event_code="Cancel" timestamp="1294215696676" minute="4"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    clears_event="11" statistics="2048=0 1024=1"
    currentPlaytime="234264" clockRunning="true"/>
</event_list>

```

```

<event_list status="event" timestamp="1291636642310">
  <event matchid="136807" event_number="30" event_code_id="257"
    event_code="Clear" timestamp="1291636029273" minute="28"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="1"
    clears_event="23" currentPlaytime="1620119" clockRunning="true"/>
</event_list>

```

```

<event_list status="event" timestamp="1294216249893">
  <event matchid="137527" event_number="7" event_code_id="1029"
    event_code="Goal Home" timestamp="1294215498423" minute="1"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    statistics="2053=0 1029=1" currentPlaytime="36010"
    clockRunning="true"/>
  <event matchid="137527" event_number="8" event_code_id="261"
    event_code="Event details for Goal in the 1. minute changed"
    timestamp="1294215509034" minute="1" tickerstate="1st half"
    tickerstateid="2" score_home="1" score_away="0" player_id="20438"
    player_num="16" event_reason="header" event_reason_id="2"
    related_events="7" related_event_codes="1029" currentPlaytime="46621"
    clockRunning="true"/>
  <...>
  <event matchid="137527" event_number="15" event_code_id="1030"
    event_code="Cancel Goal Home" timestamp="1294215894343" minute="8"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    statistics="2053=0 1029=0" currentPlaytime="431929"

```

```

        clockRunning="true"/>
</event_list>

```

#### > Player-Related Event

```

<event_list status="event" timestamp="1294216249893">
  <event matchid="137527" event_number="7" event_code_id="1029"
    event_code="Goal Home" timestamp="1294215498423" minute="1"
    tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
    statistics="2053=0 1029=1" currentPlaytime="36010"
    clockRunning="true"/>
  <event matchid="137527" event_number="8" event_code_id="261"
    event_code="Event details for Goal in the 1. minute changed"
    timestamp="1294215509034" minute="1" tickerstate="1st half"
    tickerstateid="2" score_home="1" score_away="0" player_id="20438"
    player_num="16" event_reason="header" event_reason_id="2"
    related_events="7" related_event_codes="1029" currentPlaytime="46621"
    clockRunning="true"/>
</event_list>

```

#### > Time Correction Event

A time correction can be used to send missing events afterwards for statistical correctness. In the example, a *Yellow Card* event at 05:40 was missed and sent in minute 12 (*eventNumber*=18). The time correction event (*eventNumber*=19) indicates the correct game clock of the Yellow Card event.

```

<event_list status="event" timestamp="1294216907341">
  <event matchid="137527" event_number="17" event_code_id="1034"
    event_code="Yellow card Home" timestamp="1294216155780"
    minute="12" tickerstate="1st half" tickerstateid="2" score_home="0"
    score_away="0" statistics="1034=1 2058=0"
    currentPlaytime="693365"
    clockRunning="true"/>
  <event matchid="137527" event_number="18" event_code_id="261"
    event_code="Event details for Yellow card in the 12. minute changed"
    timestamp="1294216155921" minute="12" tickerstate="1st half"
    tickerstateid="2" score_home="0" score_away="0" player_id="50411"
    player_num="3" event_reason="foul" event_reason_id="10"
    related_events="17" related_event_codes="1034"
    currentPlaytime="693506" clockRunning="true"/>
  <event matchid="137527"
    event_number="19" event_code_id="266" event_code="Yellow card time
    was adjusted to 05:40." timestamp="1294216176080" minute="12"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    correctPlaytime="340000" related_events="17"
    currentPlaytime="713666" clockRunning="true"/>
</event_list>

```

#### > Value Event

Value event parameters are passed as a list of key-value parameters (just like 'score' or 'statistics'. In the TCP XML format, only the type and value are sent.

The following shows an example for 'Jersey changed', providing information about the jersey colours of a competitor (see also chapter 8.16.1 *Jersey Colour Event*).

```

<event_list status="event" timestamp="1328618695969">
  <event matchid="301363" event_number="3" event_code_id="524"

```

```

    event_code="Jersey colors updated" timestamp="1367345798660"
    minute="0" tickerstate="Not started" tickerstateid="1"
    score_home="0" score_away="0" currentPlaytime="0"
    clockRunning="false" value_event_data="15=696 16=-1 17=-1 18=-1
    19=-1 20=0 25=true"/>
</event_list>

```

The following shows an example for 'Generic Game Conditions changed', providing information about the weather, movement, bounce, light conditions and about which match day is in progress (see also chapter 8.16.3 *Generic Game Conditions Value Event*):

```

<event_list status="event" timestamp="1460632569906">
  <event matchid="623876" event_number="4" event_code_id="286"
    event_code="Game conditions changed" timestamp="1460632569639" minute="0"
    tickerstate="Not started" tickerstateid="1" score_home="0" score_away="0"
    currentPlaytime="0" clockRunning="false" value_event_data="80=3 81=2 76=0
    78=2 79=2"/>
</event_list>

```

Generic Game Conditions are available only for Cricket and are always combined with an event via the gameId and the eventNumber. Please see chapter 2.4.8 *Generic Game Conditions Changed Event* for a detailed description.

The following shows an example for the 'Expected Goal' event and the 'Expected Goal Update' event, providing information about the expected goal values (see also chapter 8.8 *Expected Goal Data Mapping*):

```

<event_list status="event" timestamp="1535961067894">
  <event matchid="983427" event_number="26" event_code_id="1078"
    event_code="Expected Goal Home" timestamp="1535961067852" minute="0"
    tickerstate="Not started" tickerstateid="1" score_home="0" score_away="0"
    value_event_data="34=Oriol_Romeu_Vidal 100=2.0774 101=0.0486
    102=0.024829=14"/>
</event_list>

<event_list status="event" timestamp="1535961362892">
  <event matchid="983427" event_number="32" event_code_id="1079"
    event_code="Expected Goal Update Home" timestamp="1535961362780"
    minute="0" tickerstate="Not started" tickerstateid="1" score_home="0"
    score_away="0" related_events="26"
    value_event_data="34=Oriol_Romeu_Vidal 100=2.0724 101=0.0466 102=0.0247
    29=14"/>
</event_list>

```

#### > Line-up Event

```

<event_list status="event" replytype="error" timestamp="1334143204406">
  <event matchid="216044" event_number="0" event_code_id="520"
    event_code="Lineup changed" timestamp="1334143124530" minute="0"
    tickerstate="Not started" tickerstateid="1" score_home="0"
    score_away="0" currentPlaytime="0" clockRunning="false">
    <lineups squad_type="Starting11" squad_type_id="1" team_name="Borussia
    Dortmund" team_id="236">

```

```

        <lineup jersey_number="1" match_name="Roman Weidenfeller"
player_id="1543"/>
        <lineup jersey_number="5" match_name="Sebastian Kehl"
player_id="1554"/>
        <lineup jersey_number="11" match_name="Mario Götze"
player_id="53833"/>
        <lineup jersey_number="13" match_name="Damien Le Tallec"
player_id="28369"/>
        <lineup jersey_number="9" match_name="Robert Lewandowski"
player_id="11348"/>
        <lineup jersey_number="4" match_name="Neven Subotic" player_id=
"23274"/>
        <lineup jersey_number="6" match_name="Florian Krinke"
player_id="1550"/>
        <lineup jersey_number="8" match_name="Antonio Da Silva"
player_id="8972"/>
        <lineup jersey_number="2" match_name="Julian Koch"
player_id="57928"/>
        <lineup jersey_number="7" match_name="Moritz Leitner"
player_id="57932"/>
        <lineup jersey_number="14" match_name="Ivan Perisic"
player_id="57933"/>
    </lineups>
    <lineups squad_type="Bench" squad_type_id="4" team_name="Borussia
Dortmund" team_id="236">
        <lineup jersey_number="15" match_name="Mats Hummels"
player_id="1561"/>
        <lineup jersey_number="16" match_name="Jakub Blaszczykowski"
player_id="1562"/>
        <lineup jersey_number="19" match_name="Kevin Großkreutz"
player_id="53837"/>
        <lineup jersey_number="20" match_name="Mitchell James Langerak"
player_id="18500"/>
        <lineup jersey_number="18" match_name="Lucas Barrios"
player_id="764"/>
    </lineups>
    <lineups squad_type="Starting11" squad_type_id="1" team_name="SV
Werder Bremen" team_id="1187">
        <lineup jersey_number="6" match_name="Tim Borowski"
player_id="3884"/>
        <lineup jersey_number="4" match_name="Naldo" player_id="7992"/>
        <lineup jersey_number="8" match_name="Clemens Fritz"
player_id="25142"/>
        <lineup jersey_number="1" match_name="Tim Wiese"
player_id="25143"/>
        <lineup jersey_number="10" match_name="Marko Marin"
player_id="12308"/>
        <lineup jersey_number="7" match_name="Marko Arnautovic"
player_id="12193"/>
        <lineup jersey_number="5" match_name="Wesley" player_id="8836"/>
        <lineup jersey_number="2" match_name="Sebastian Boenisch"
player_id="57211"/>
        <lineup jersey_number="9" match_name="Denni Avdic"
player_id="8479"/>
        <lineup jersey_number="11" match_name="M. Rosenberg"
player_id="6815"/>
        <lineup jersey_number="3" match_name="Affolter"

```

```

        player_id="59270"/>
    </lineups>
    <lineups squad_type="Bench" squad_type_id="4" team_name="SV Werder
        Bremen" team_id="1187">
        <lineup jersey_number="15" match_name="Sebastian Prödl"
            player_id="3906"/>
        <lineup jersey_number="14" match_name="Aaron Hunt"
            player_id="55808"/>
        <lineup jersey_number="16" match_name="Mikael Silvestre"
            player_id="47863"/>
        <lineup jersey_number="13" match_name="Lukas Schmitz"
            player_id="46658"/>
        <lineup jersey_number="17" match_name="Aleksandar Ignjovski"
            player_id="58128"/>
    </lineups>
</event>
</event_list>

```

#### > Player Data Confirmation

```

<event_list status="event" timestamp="1328688111364">

    <event matchid="184564" event_number="3" event_code_id="1029"
        event_code="Goal Home" timestamp="1328688111573" minute="1"
        tickerstate="1st half" tickerstateid="2" score_home="1" score_away="0"
        statistics="2053=0 1029=1" currentPlaytime="8346"
        clockRunning="true"/>
    <event matchid="184564" event_number="4" event_code_id="261"
        event_code="Event details for Goal in the 1. minute changed"
        timestamp="1328688135506" minute="1" tickerstate="1st half"
        tickerstateid="2" score_home="1" score_away="0" player_id="13169"
        player_num="45" player_name="Mario Balotelli" event_reason="shot"
        event_reason_id="0" related_events="3"
related_event_codes="1029" currentPlaytime="32279" clockRunning="true"/>
</event_list>
<event_list status="event" timestamp="1328688711573">
    <event matchid="184564" event_number="50" event_code_id="285"
        event_code="Player data for Goal in the 1. minute confirmed."
        timestamp="1328688711565" minute="10" tickerstate="1st half"
        tickerstateid="2" score_home="1" score_away="0" related_events="3"
        related_event_codes="1029" currentPlaytime="600000"
        clockRunning="true"/>
</event_list>

```

#### 6.2.24 Book Game – Request

```

<book_match_request timestamp="1184145289891" matchid="117655" />

```

#### 6.2.25 Book Game – Response

```

<book_match_response matchid="117655" timestamp="1271935852332"
status="book_ok" />

```

Possible values for status: book\_ok, already\_booked, error



### 6.2.26 Unbook Game – Request

```
<unbook_match_request timestamp="1184145289891" matchid="117655" />
```

### 6.2.27 Unbook Game – Response

```
<unbook_match_response matchid="117655" timestamp="1271935805385"
status="unbook_ok" />
```

Possible values for status: unbook\_ok, not\_booked\_before, error

### 6.2.28 Logout

```
<logout />
```

### 6.2.29 System Message

```
<event_list status="event" timestamp="1298565887296">
  <event matchid="154534" event_number="112" event_code_id="513"
    event_code="System message received" timestamp="1298565858986"
    minute="170" tickerstate="1st half" tickerstateid="2" score_home="0"
    score_away="0" currentPlaytime="10174560" clockRunning="true"
    message_id="309" message="Game is suspended - referee is injured"
  /> </event_list>
```

#### > Outdated:

The format below is still supported for compatibility reasons but should not be used any longer:

```
<event_list status="event" timestamp="1291644416392">
  <event matchid="136806" event_number="17" event_code_id="513"
    event_code="System message received" timestamp="1291643808986"
    minute="169" tickerstate="1st half" tickerstateid="2" score_home="2"
    score_away="2" currentPlaytime="10134085" clockRunning="true"/>
</event_list>
  <message_list timestamp="1291644416416">
    <message matchid="136806" event_number="17" message="Game is
suspended - players are fighting" message_id="308"
timestamp="1291643808986"/>
  </message_list>
```

A System Message is always combined with an event via the *matchId* and the *eventNumber*. Please refer to chapter 8.9 *System Message Mapping* for all possible System Messages.

### 6.2.30 Game Conditions

```
<event_list status="event" timestamp="1298565887296">
  <event matchid="154534" event_number="129" event_code_id="258"
    event_code="Game conditions changed" timestamp="1298566801437"
    minute="186" tickerstate="1st half" tickerstateid="2" score_home="0"
    score_away="0" currentPlaytime="11117009" clockRunning="true"
```

```

        attendance_id="0"      attendance="small" pitch_condition_id="4"
        pitch_condition="regular" weather_condition_id="14"
        weather_condition="sunny" />
</event_list>

```

> **Outdated:**

The format below is still supported for compatibility reasons but should not be used any longer:

```

<event_list status="event" timestamp="1291644263526">
  <event matchid="136806" event_number="16" event_code_id="258"
    event_code="Game conditions changed" timestamp="1291643656250"
    minute="167" tickerstate="1st half" tickerstateid="2" score_home="2"
    score_away="2" currentPlaytime="9981349" clockRunning="true"/>
</event_list>
  <game_condition_list timestamp="1291644263531">
    <game_condition attendance="medium" attendance_id="1"
      event_number="16" matchid="136806" pitch_condition="regular"
      pitch_condition_id="4" timestamp="1291643656250"
      weather_condition="sunny"
      weather_condition_id="14"/>
  </game_condition_list>
</event_list>

```

Game Conditions are always combined with an event via the *gameId* and the *eventNumber*. Please refer to chapter 2.4.7 *Game Condition Event* for detailed description of the pitch & weather conditions and the attendance.

### 6.2.31 Assist

```

<event_list status="event" timestamp="1460631168245">
  <event matchid="623872" event_number="120" event_code_id="287"
    event_code="Assist details for Goal in minute 1 changed."
    timestamp="1460631168056" minute="1" tickerstate="1st half"
    tickerstateid="2" score_home="1" score_away="0" player_id="58151"
    player_num="7" event_reason="other" event_reason_id="99"
    related_events="116" related_event_codes="1029" currentPlaytime="31592"
    clockRunning="true"/>
</event_list>

```

### 6.2.32 Game Possession Statistics

```

<event_list status="event" timestamp="1478167270581">
  <event matchid="569687" event_number="56" event_code_id="1024"
    event_code="Attack Home" timestamp="1478167270544" minute="173"
    tickerstate="1st half" tickerstateid="2" score_home="0" score_away="0"
    statistics="1024=10 2048=5 1063=70 2087=30" currentPlaytime="10334354"
    clockRunning="true"/>
</event_list>

```

### 6.2.33 Runner on Base Event

```

<event_list status="event" timestamp="1542888400622">
  <event matchid="982884" event_number="56" event_code_id="232"
    event_code="Runner On Base" timestamp="1542888400622" minute="16"

```



```
tickerstate="Inning 1" tickerstateid=" 2601" score_home="0" score_away="0"
currentPlaytime="31674" clockRunning="true" score="1873=0 2897=0 1860=0
2884=0 1868=1 2892=1" value_event_data="15=46860 42=356833
43=Christian_Yelich 44=22"/>
</event_list>
```

Value event types are only shown for loaded bases. Please refer to chapter 8.16.12 *Runner on Base Value Event* for detailed information.

## 6.3 TCP Text Protocol Details

**Note:** This protocol is not up-to-date and does not offer the full variety of RunningBall services (e.g. Player information / line-up data).

### 6.3.1 Keep Alive from the Client

X

### 6.3.2 Keep Alive from the Server

X|1224837313875

The second value corresponds to the current timestamp of the server (long).

### 6.3.3 Login – Request

LI username password

### 6.3.4 Login – Response

LI ...if the login is accepted, or

LI 1 ...if the username or the password is wrong.

**Note:** "LI 1" is also sent if the client tries to execute any other function without being logged in.

### 6.3.5 Timestamp – Request

TS

### 6.3.6 Timestamp – Response

TS 1224837313875

### 6.3.7 Game Clock – Request

C 96845

The number value stands for the game ID.

### 6.3.8 Game Clock – Response

C|tickerId|gameClock|isTicking

The game clock is provided in the format mm:ss or mmm:ss for overtime. *isTicking* informs about whether or not the game clock is currently running. It can have the values "T" for ticking or "NT" for not ticking.

### 6.3.9 Feedback – Request

With this command you can give us feedback on a particular game. *text* should contain the feedback text where all spaces are replaced by underlines (" " □ " \_ "). *isScoutRelated* should be 1 if the comment concerns the Scout at the venue (e.g. the events are entered too slowly), otherwise it should be 0. This data is evaluated by our quality assurance team and necessary measures will be taken in case there are any problems.

### 6.3.10 Feedback – Response

> FB

### 6.3.11 Game List – Request

> G

Returns all available games with a game start time from now minus 24 hours until now plus 14 days.

> G dateTo

Returns all games with a game start time from now minus 24 hours until dateTo 23:59:59.

> G dateFrom dateTo

Returns all games with a game start time from dateFrom 00:00:00 until dateTo 23:59:59.

The GMT time zone is expected and the format of the date parameters is dd/mm/yyyy.

### 6.3.12 Game List – Response

country|league|teamHome|teamAway|stadium|timestamp|gameId|coverage|countryId|leagueId|teamHomeId|teamAwayId|stadiumId|booked|liveOddsAvailable|oddsAvailable|sportsId|hasPlayerData|[[|leagueParameterList|][|refereeId|referee|][|gameDataParameterList|]

The attributes in squared brackets are optional (can be enabled/disabled in the configuration).

Or:

Error wrong date format

The same response format is provided for all three different game list request types.

- > Timestamp is long.
- > Coverage indicates whether a game is a TV Game TV (0) or a Live Game (1)
- > Booked, liveOddsAvailable and oddsAvailable are Booleans (1 is true, 0 is false).

### 6.3.13 Register Game – Request

RST gameId

### 6.3.14 Register Game – Response

|                                      |       |
|--------------------------------------|-------|
| RST gameId                           | ...or |
| Error game already registered gameId | ...or |
| Error game not booked gameId         | ...or |
| Error                                |       |

Please refer to chapter 6.1.2 *Game Registration* about game registration. A game that is not cannot be registered. A game that is finished cannot be registered anymore either.

### 6.3.15 Retrieve Registered Game – Request

RRG

### 6.3.16 Retrieve Registered Game – Response

RRG|98465|84875|64158|...

There is an entry in this list for every registered game.

### 6.3.17 Re-Send Game – Request 1

RSD gameId sequenceId

### 6.3.18 Re-Send Game – Request 2

RSD2 timeFrom timeTo gameId1 gameId2 gameId3...

timeFrom and timeTo are long values defining the time range in which all events for the provided game IDs are resent.

### 6.3.19 Re-Send Game – Response



Substitution updates have the same format as regular substitution events, but are used to update information for an existing substitution event (relatedSportsTickerEventNumber). EventReasonId is optional, -1 means 'not set'.

Sample:

```
E|27|123456|1055|1370874240384|0|1740000|1|23|10|12345|54321|P._In|P._Out  
E|28|123456|283|1370874264351|0|1740000|1|23|10|12345|54321|P._In|P._Out|27|20  
    > Player-Related Event (eventCodeId=261)
```

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|eventReasonId|playerNum|playerId|  
relatedSportsTickerEventNumber|relatedEventCodeId
```

Please refer to chapter 8.2 *Event Reason Mapping* for a detailed description of event reasons.

> Stoppage Time Event (eventCodeId=260)

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|stoppageTime
```

> Cancel Last Sent (eventCodeId=256)

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|cleared_events_list
```

Cleared\_events\_list is a list of the short type with blank paces as separator characters. It specifies the event numbers of the events to be cleared. Cancel last sent deletes the last entered event.

> Clear (eventCodeId=257)

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|cleared_events_list
```

Clear can be applied to any of the previously entered events.

> Cancel Events (CCRx, CGOALx, CPENx, CRCx, CYC/RCx, CYCx)

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|related_events_list
```

Related\_events\_list is a list of the short type with blank spaces as separator characters. It specifies the event numbers of the events to be cleared (e.g. if CGOAL1 is sent, related\_events\_list contains the eventNumber of the GOAL 1 to be deleted).

> Time Correction Event (eventCodeID=266)

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|correctPlaytime|related_events_list
```

> Value Event

```
E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRun  
ning|valueEventArray
```

Value event parameters are transmitted as a blank-separated list of key-value-pairs (if more than one parameter per value event is available).

E|729|183887|2625|1326962478837|2|162348|1|3=4 1=60 2=20

> **Player Data Confirmation** (eventCodeID=285)

E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRunning| **relatedSportsTickerEventNumber|relatedEventCodeId**

Sample:

E|26|123456|1029|1373965144335|3|1740000|1  
E|27|123456|261|1373965144373|0|1740000|1|0|9|1001|26|1029  
E|28|123456|**285**|1373965144335|3|1740000|1|**26|1029**

#### 6.3.24 Book Game – Request

B gameId

#### 6.3.25 Book Game – Response

B gameId ...or  
Error game was already booked before gameId

#### 6.3.26 Unbook Game – Request

UB gameId

#### 6.3.27 Unbook Game – Response

UB gameId ...or  
Error game was not booked before gameId ...or  
Error

#### 6.3.28 Logout

LO

#### 6.3.29 System Message

E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRunning|msgId|message

> **Outdated:**

The format below is still supported for compatibility reasons but should not be used any longer.

E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRunning  
M|gameId|timestamp|message|eventNumber

A System Message is always combined with an event, linked together via gameId and eventNumber. Please refer to chapter 8.9 *System Message Mapping* for all possible System Messages.

### 6.3.30 Game Conditions

E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRunning|attendanceId|pitchConditionId|weatherConditionId

#### > Outdated:

The format below is still supported for compatibility reasons but should not be used any longer.

E|sequenceId|gameId|eventCodeId|timestamp|gameMinute|currentPlaytime|gameClockRunning  
GC|gameId|attendanceId|pitchConditionId|weatherConditionId|eventNumber

A Game Condition is always combined with an event, linked together via gameId and eventNumber. Please refer to chapter 8.6 *Game Condition Mapping* for detailed description of pitch condition, weather condition and attendance.

### 6.3.31 Game Possession Statistics

#### > Possession Information

E|0|527580|517|1436858326483|0|0|0|2087=50 1063=50 (regular event)  
E|12|527580|1024|1436858445017|1|5485|1|2048=0 2087=0 1024=1 1063=100  
(possession + AT stats)  
E|23|527580|262|1436858510253|2|70722|1|2087=53 1063=47|FK4|1582|20|1028  
(possession stats + BP metadata)

#### > Possession Information Enabled but no Statistics Available

E|17|123456|1029|1436858892850|3|1740000|1| (empty statistics field added at end)  
E|27|123456|262|1436858973769|0|1740000|1||FK1|-1|26|1042 (empty statistics field in message)

## 6.4 Error Handling

If the server detects a command it does not understand, null or a connection loss it closes the socket forcing the client to reconnect.

# 7 Http Connections

## 7.1 Http XML

This chapter contains examples for the xml formats used for the Http XML web post data feed. The encoding used is UTF-8. Xsd type definitions can be obtained on request.

**Note:** All data is sent into the http form post parameter called "rb\_data".

The Http XML push web post data feed is managed by RunningBall on the sender side and the receiver interface is provided by the customer where the communication between the customer and the RunningBall client side is done over Http POST (see graphic below). In this case, the customer is fully responsible for the function of the service running at the receiver interface.

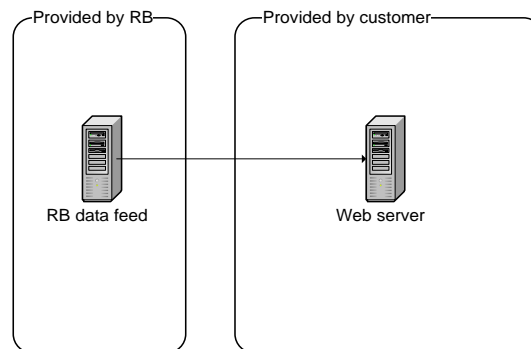


Figure 10 – Architecture http XML Push Feed

The interface on client side has to fulfil the following requirements so that RunningBall can ensure an adequate QoS.

In terms of data throughput, the following rule has to be considered: a RunningBall soccer game consists of approximately 1000 events (in total over ~ 90 min). This may lead to 1000 XML messages per game. Considering that one XML message consists of approximately 250 characters, the following formulas can be used to calculate the number of calls and the sent raw data for the number of games that is to be consumed simultaneously (at peak times RunningBall provides up to 150 games in parallel):

**Number of http calls** = Number of games \* Number of events

**Raw data (excl. http overhead)** = Number of games \* Number of events \* message size (250 byte)

**Worst case scenario** (150 games simultaneously; all starting at the same time):

**Number of http calls** = 150 \* 1000

= 150.000 per 90 minutes (~**28 http calls per second**)



**Raw data** (excl. http overhead) = 150 \* 1000 \* 250

= 37.500.000 byte per 90 minutes (**~6,9kB per second**)

The amount of calls and data can be reduced drastically by filtering out events which are not of interest. In case only main events should be transmitted (start/stop, goals, cards, penalties, corners, throw-ins, goal kicks, fouls, substitutions and shots) the number of events per game will come down to approximately 300, which would be a third of the worst-case scenario.

#### 7.1.1 Keep Alive

```
<keep_alive date_generated="2010-04-22T08:05:39.485Z" pusher_id="1" />
```

#### 7.1.2 Game List

```
<match_list date_generated="2016-11-01T09:56:00.904Z" pusher_id="0">
  <match game_id="569589" date="2016-10-31T14:30:00.000Z" team1="SV Alemania
Waldalgesheim" team1_id="31137" team2="VfL Bochum" team2_id="1335" league="DFB
Pokal" league_id="54" country1="Germany" country1_id="0" country2="Germany"
country2_id="0" neutralvenue="false" stadium="Sportplatz an der Waldstra&#191;e"
stadium_id="22452" coverage="LIVE" coverage_id="0" playstate="Cancelled"
playstate_id="2" scout_confirmed="true" league_country="Germany"
league_country_id="0" booked="true" iso="DEU" odds_available="false"
live_odds_available="false" league_halftime_duration="45" league_overtime_duration="15"
league_has_penalty_shootout="true" league_has_player_data="true" sportId="1"
sportname="Soccer" scout_id="17633" scout_num_games="11"
scout_avg_rating="1.545454545454545" scout_last10_avg_rating="1.6"/>
</match_list>
```

> Game Series:

```
<match game_id="414945" date="2014-05-07T18:45:00.000Z" team1="AZ Alkmaar"
team1_id="240" team2="SC Heerenveen" team2_id="467"
league="Eredivisie" league_id="101" country1="Netherlands"
country1_id="4" country2="Netherlands" country2_id="4"
neutralvenue="false" stadium="AFAS Stadion" stadium_id="2291"
coverage="LIVE" coverage_id="0" playstate="Open" playstate_id="0"
scout_confirmed="true" league_country="Netherlands"
league_country_id="4" booked="true" iso="NLD" odds_available="false"
live_odds_available="false" league_halftime_duration="45"
league_overtime_duration="0" league_has_penalty_shootout="false"
league_has_player_data="true" sportId="1" sportname="Soccer" >
  <series num_of_matches="2" team1_id="240" team2_id="467">
    <seriesMatch leg="1" date="2014-05-07T18:45:00.000Z" team1_id="240"
team2_id="467" playstate_id="0" playstate="Open"
game_id="414945"/>
    <seriesMatch leg="2" date="2014-05-10T18:45:00.000Z" team1_id="467"
team2_id="240" playstate_id="0" playstate="Open"
game_id="414946"/>
  </series>
</match>
```

### 7.1.3 Sports Ticker Event

#### > Game Event

```
<event_list date_generated="2011-01-05T09:15:26.008Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="137527" minute="46" event_number="35" event_code_id="2075"
    date="2011-01-05T09:02:54.092Z" event_code="Safe Away"
    tickerstate_id="2" tickerstate="1st half" score_home="0"
    score_away="0" statistics="2053=0 1029=0" seconds="2711"
    currentPlaytime="2711680" clockRunning="true"/>
</event_list>
```

#### > Ball Position

```
<event_list date_generated="2011-01-05T09:16:41.731Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="137527" minute="47" event_number="36" event_code_id="1028"
    date="2011-01-05T09:04:10.178Z" event_code="Free kick Home"
    tickerstate_id="2" tickerstate="1st half" score_home="0"
    score_away="0" statistics="2052=1 1028=1"
    seconds="2787" currentPlaytime="2787765" clockRunning="true"/>
  <event game_id="137527" minute="47" event_number="37" event_code_id="1027"
    date="2011-01-05T09:04:10.279Z" event_code="Dangerous Free kick Home"
    tickerstate_id="2" tickerstate="1st half" score_home="0"
    score_away="0" currentPlaytime="2787867" clockRunning="true"/>
  <event game_id="137527" minute="47" event_number="38"
event_code_id="262" date="2011-01-05T09:04:10.279Z"
event_code="Zone information" tickerstate_id="2" tickerstate="1st
half" score_home="0"
    score_away="0" related_events="36" zone="FK4" team_id="0"
    related_event_codes="1028" statistics="2051=1 1027=1" seconds="2787"
    currentPlaytime="2787867" clockRunning="true"/>
</event_list>
```

#### > Substitution Event

```
<event_list date_generated="2012-02-08T08:09:26.265Z" pusher_id="2"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="184564" minute="3" event_number="5" event_code_id="1055"
    date="2012-02-08T08:03:52.563Z" event_code="Substitution Home"
    tickerstate_id="2" tickerstate="1st half" score_home="1"
    score_away="0" player_in_num="24" player_out_num="37"
player_in_id="3502" player_out_id="57619" player_in_name="P.
Vieira" player_out_name="Gunnar Nielsen" statistics="1055=1 2079=0"
    currentPlaytime="129334" clockRunning="true"/>
</event_list>
```

#### > Substitution Update Event

```
<event_list date_generated="2013-06-10T16:27:07.307Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="1234" minute="2" event_number="5" event_code_id="1055"
    date="2013-06-10T16:27:07.307Z" event_code="Substitution Home"
    tickerstate_id="2" tickerstate="1st half" score_home="2"
    score_away="2" player_in_num="13" player_out_num="9"
```

```

        player_in_id="1013" player_out_id="1009"
        player_in_name="playerInName" player_out_name="playerOutName"
        currentPlaytime="150000"
        clockRunning="false" />
    <event game_id="1234" minute="2" event_number="6" event_code_id="283"
        date="2013-06-10T16:27:28.446Z" event_code="Substitution details for
        Substitution in the 2. minute changed" tickerstate_id="2"
        tickerstate="1st half" score_home="2" score_away="2"
        related_events="5" player_in_num="13" player_out_num="9"
        player_in_id="1013" player_out_id="1009"
        player_in_name="playerInName" player_out_name="playerOutName"
        event_reason_id="20"
        event_reason="injury" currentPlaytime="150000" clockRunning="false" />
</event_list>

```

#### > Player-Related Event

```

<event_list date_generated="2012-02-08T08:09:26.265Z" pusher_id="2"
    xmlns="http://rball.com/eventpusher/data/xmlbeans">
    <event game_id="184564" minute="1" event_number="3" event_code_id="1029"
        date="2012-02-08T08:01:51.573Z" event_code="Goal Home"
        tickerstate_id="2" tickerstate="1st half" score_home="1"
        score_away="0" statistics="2053=0 1029=1" currentPlaytime="8346"
        clockRunning="true"/>
    <event game_id="184564" minute="1" event_number="4" event_code_id="261"
        date="2012-02-08T08:02:15.507Z" event_code="Event details for Goal in
        the 1. minute changed" tickerstate_id="2" tickerstate="1st half"
        score_home="1" score_away="0" related_events="3"
        event_reason="shot"
        event_reason_id="0" player_num="45" player_id="13169"
        player_name="Mario Balotelli" related_event_codes="1029"
        currentPlaytime="32279" clockRunning="true"/>
</event_list>

```

#### > Stoppage Time Event

```

<event_list date_generated="2011-01-05T09:22:44.796Z" pusher_id="3"
    xmlns="http://rball.com/eventpusher/data/xmlbeans">
    <event game_id="137527" minute="53" event_number="41"
        event_code_id="260"
        date="2011-01-05T09:10:13.220Z" event_code="Stoppage time"
        tickerstate_id="2" tickerstate="1st half" score_home="1"
        score_away="0" stoppage_time="9" seconds="3150"
        currentPlaytime="3150806" clockRunning="true"/>
</event_list>

```

#### > Cancellation & Clear Event

```

<event_list date_generated="2011-01-05T09:24:13.734Z" pusher_id="3"
    xmlns="http://rball.com/eventpusher/data/xmlbeans">
    <event game_id="137527" minute="46" event_number="44" event_code_id="1039"
        date="2011-01-05T09:11:42.151Z" event_code="Shot (on target) Home"
        tickerstate_id="8" tickerstate="2nd half" score_home="1"
        score_away="0" statistics="1039=1 2063=0" seconds="2705"
        currentPlaytime="2705628" clockRunning="true"/>
    <event game_id="137527" minute="46" event_number="45"
        event_code_id="256" date="2011-01-05T09:11:44.011Z"
        event_code="Cancel" tickerstate_id="8" tickerstate="2nd half"

```

```

score_home="1" score_away="0" clears_event="44"
  statistics="1039=0 2063=0" seconds="2707" currentPlaytime="2707489"
  clockRunning="true"/>
</event_list>

<event_list date_generated="2011-01-05T09:27:25.781Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="137527" minute="49" event_number="47" event_code_id="1029"
    date="2011-01-05T09:14:54.161Z" event_code="Goal Home"
    tickerstate_id="8" tickerstate="2nd half" score_home="1"
    score_away="0" statistics="2053=0 1029=1" seconds="2897"
    currentPlaytime="2897638" clockRunning="true"/>
  [...]
  <event game_id="137527" minute="58" event_number="54"
    event_code_id="1030" date="2011-01-05T09:16:00.720Z"
    event_code="Cancel Goal Home" tickerstate_id="8" tickerstate="2nd
    half" score_home="0"
    score_away="0" statistics="2053=0 1029=0" seconds="3462"
    currentPlaytime="3462353" clockRunning="true"/>
</event_list>

```

#### > Related Event

```

<event_list date_generated="2010-04-22T08:47:25.354Z" pusher_id="1">
  <event game_id="136807" minute="34" event_number="37" event_code_id="1031"
    date="2010-12-06T11:54:04.303Z" event_code="Penalty Home"
    tickerstate_id="2" tickerstate="1st half" score_home="0"
    score_away="1" statistics="2055=0 1031=1" seconds="2035"
    currentPlaytime="2035148" clockRunning="true"/>
  <event game_id="136807" minute="35" event_number="38" event_code_id="142"
    date="2010-12-06T11:54:11.037Z" event_code="Missed" tickerstate_id="2"
    tickerstate="1st half" score_home="0" score_away="1"
    related_events="37" seconds="2041" currentPlaytime="2041880"
    clockRunning="true"/>
</event_list>

```

#### > Time Correction Event

```

<event_list date_generated="2011-01-05T09:34:26.927Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="137527" minute="64" event_number="55" event_code_id="1034"
    date="2011-01-05T09:21:55.289Z" event_code="Yellow card Home"
    tickerstate_id="8" tickerstate="2nd half" score_home="0"
    score_away="0" statistics="1034=2 2058=1" seconds="3816"
    currentPlaytime="3816922" clockRunning="true"/>
  <event game_id="137527" minute="64" event_number="56" event_code_id="261"
    date="2011-01-05T09:21:55.376Z" event_code="Event details for Yellow card
in the
64. minute changed" tickerstate_id="8" tickerstate="2nd half" score_home="0"
score_away="0" related_events="55" event_reason="foul"
event_reason_id="10" player_num="0" player_id="-1"
related_event_codes="1034" seconds="3817" currentPlaytime="3817008"
clockRunning="true"/>
  <event game_id="137527" minute="64" event_number="57"
    event_code_id="266" date="2011-01-05T09:22:09.396Z"
    event_code="Yellow card time was adjusted to 50:00."
    tickerstate_id="8" tickerstate="2nd half" score_home="0"
    score_away="0" related_events="55"

```

```

        correctPlaytime="3000000" seconds="3831" currentPlaytime="3831027"
        clockRunning="true"/>
</event_list>

```

#### > Value Event

Value event parameters are provided as a list of key-value parameters (just as 'score' or 'statistics'). In the Http XML format, only the type and the value are sent.

The following shows a sample of 'Jersey changed', providing jersey color information for a team (See also chapter 8.16.1 *Jersey Colour Event*).

```

<event_list date_generated="2012-02-07T10:55:10.661Z" pusher_id="2"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="240361" minute="1" event_number="10" event_code_id="524"
    date="2012-08-19T14:59:17.157Z" event_code="Jersey colors updated"
    tickerstate_id="2" tickerstate="1st half" score_home="0"
    score_away="0" currentPlaytime="22954" clockRunning="true"
    value_event_data="15=6708 16=1 17=-16777216 18=-16777216 19=-
16777216 20=1"/>
</event_list>

```

The following shows an example for the 'Expected Goal' event and the 'Expected Goal Update' event, providing information about the expected goal values (see also chapter 8.8 *Expected Goal Data Mapping*):

```

<event_list date_generated="2018-09-03T07:51:07.894Z" pusher_id="0"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="983427" minute="0" event_number="26"
    event_code_id="1078" date="2018-09-03T07:51:07.852Z" event_code="Expected
    Goal Home" tickerstate_id="1" tickerstate="Not started" score_home="0"
    score_away="0" statistics="1063=50 2087=50" currentPlaytime="0"
    clockRunning="false" value_event_data="33=57447 34=Oriol_Romeu_Vidal
    100=2.0774 101=0.0486 102=0.0248 103=78056 104=841 105=15 106=20
    107=22 108=18 109=20 29=14" team_id="1276"/>
</event_list>

<event_list date_generated="2018-09-03T07:56:02.892Z" pusher_id="0"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="983427" minute="0" event_number="32" event_code_id="1079"
    date="2018-09-03T07:56:02.780Z" event_code="Expected Goal Update Home"
    tickerstate_id="1" tickerstate="Not started" score_home="0" score_away="0"
    related_events="26" statistics="1063=50 2087=50" currentPlaytime="0"
    clockRunning="false" value_event_data="33=57447 34=Oriol_Romeu_Vidal
    100=2.0774 101=0.0446 102=0.0248 103=78156 104=811 105=15 106=20
    107=22 108=16 109=20 29=14" team_id="1276"/>
</event_list>

```

#### > Line-up Event

```

<event_list date_generated="2010-12-06T13:49:50.004Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="194625" minute="0" event_number="3" event_code_id="520"
    date="2011-11-20T15:45:23.020Z" event_code="Lineup changed"
    tickerstate_id="1" tickerstate="Not started" score_home="0"
    score_away="0" seconds="0">
    <lineups squad_type="Starting11" squad_type_id="1" team_name="Stade
    Brestois 29" team_id="376">

```

```

<lineup jersey_number="1" match_name="Steeve Elana"
player_id="24765"/>
<lineup jersey_number="6" match_name="Bruno Grougi"
player_id="28640"/>
<lineup jersey_number="4" match_name="Johan Martial"
player_id="57075"/>
<lineup jersey_number="27" match_name="Mario Licka"
player_id="14288"/>
<lineup jersey_number="26" match_name="Nolan Roux"
player_id="54485"/>
<lineup jersey_number="10" match_name="Larsen Toure"
player_id="48083"/>
<lineup jersey_number="12" match_name="Paul Baysse"
player_id="49110"/>
<lineup jersey_number="8" match_name="Jonathan Zebina"
player_id="591"/>
<lineup jersey_number="29" match_name="Gregory Lorenzi"
player_id="24771"/>
<lineup jersey_number="2" match_name="John Jairo Culma"
player_id="58131"/>
<lineup jersey_number="9" match_name="Eden Ben Basat"
player_id="58133"/>
</lineups>
<lineups squad_type="Bench" squad_type_id="4" team_name="Stade
Brestois 29" team_id="376">
  <lineup jersey_number="20" match_name="Romain Poyet"
player_id="24785"/>
  <lineup jersey_number="5" match_name="Oscar Ewolo"
player_id="3657"/>
  <lineup jersey_number="25" match_name="Omar Daf"
player_id="1492"/>
  <lineup jersey_number="19" match_name="Benoît Lesoimier"
player_id="29608"/>
  <lineup jersey_number="15" match_name="Tomas Micola"
player_id="12369"/>
  <lineup jersey_number="17" match_name="Santiago Gentiletti"
player_id="58134"/>
  <lineup jersey_number="30" match_name="Joan Hartock"
player_id="8664"/>
</lineups>
<lineups squad_type="Starting11" squad_type_id="1" team_name="FC
Sochaux Montbéliard" team_id="228">
  <lineup jersey_number="16" match_name="Teddy Richert"
player_id="1488"/>
  <lineup jersey_number="11" match_name="Yassin Mikari"
player_id="1507"/>
  <lineup jersey_number="14" match_name="Marvin Martin"
player_id="23190"/>
  <lineup jersey_number="21" match_name="Vincent Nogueira"
player_id="23192"/>
  <lineup jersey_number="20" match_name="Edouard Butin"
player_id="23193"/>
  <lineup jersey_number="23" match_name="David Sauget"
player_id="7503"/>
  <lineup jersey_number="29" match_name="Mathieu Peybernes"
player_id="56941"/>
  <lineup jersey_number="6" match_name="Kevin Anin"
player_id="23463"/>

```



```

        <lineup jersey_number="2" match_name="Sebastien Corchia"
        player_id="57819"/>
        <lineup jersey_number="9" match_name="Sloan Privat"
        player_id="57820"/>
        <lineup jersey_number="5" match_name="Carlos Alberto Carlao"
        player_id="56942"/>
    </lineups>
    <lineups squad_type="Bench" squad_type_id="4" team_name="FC Sochaux
    Montbéliard" team_id="228">
        <lineup jersey_number="27" match_name="Loic Poujol"
        player_id="53556"/>
        <lineup jersey_number="15" match_name="Modibo Maiga"
        player_id="11805"/>
        <lineup jersey_number="7" match_name="Rafael Dias"
        player_id="56944"/>
        <lineup jersey_number="8" match_name="Abdoul Razzagui Camara"
        player_id="55020"/>
        <lineup jersey_number="1" match_name="Cros" player_id="59057"/>
        <lineup jersey_number="33" match_name="Zouma" player_id="59189"/>
    </lineups>
</event>
</event_list>

```

#### > Score

Basketball and soccer use the straightforward home vs. away score scheme (scoreHome / scoreAway) as shown in other message samples. Other sports may also provide more than two values (volleyball: points in current set; ice hockey: goals in current period; cricket: wickets and legal balls in current inning etc.).

```

<event game_id="334293" minute="0" event_number="4" event_code_id="1421"
date="2014-01-10T09:04:32.983Z" event_code="Point Home"
tickerstate_id="2101" tickerstate="1st set" score_home="0" score_away="0"
statistics="2445=0 1421=1" currentPlaytime="12990" clockRunning="true"
score="1421=1 2445=0"/>

```

Further information is given in chapter *8.13 Score Mapping*.

#### > Player Data Confirmation

```

<event_list date_generated="2013-07-16T08:46:11.670Z" pusher_id="1"
xmlns="http://rball.com/eventpusher/data/xmlbeans">
    <event game_id="319129" minute="2" event_number="3" event_code_id="2058"
date="2013-07-16T08:46:11.360Z" event_code="Yellow card Away"
tickerstate_id="2" tickerstate="1st half" score_home="0"
score_away="0" statistics="1034=1 2058=1" seconds="102"
currentPlaytime="102384" clockRunning="true"/>
    [...]
    <event game_id="319129" minute="2" event_number="5" event_code_id="285"
date="2013-07-16T08:46:15.842Z" event_code="Player data for Yellow
card in the 2. minute confirmed." tickerstate_id="2" tickerstate="1st
half" score_home="0" score_away="0" related_events="3"
related_event_codes="2058" seconds="106" currentPlaytime="106865"
clockRunning="true"/>
</event_list>

```

#### 7.1.4 Market Price (Deprecated)

```
<market_price_list date_generated="2010-04-22T10:12:06.149Z" pusher_id="1">
  <market_price id="0" provider_id="1" provider="MARKET_AVG
    market_id="22" market="Next goal HT1" selection_id="3" selection="X"
    game_id="117655" value="0.0" price="3.22" pp="0.0" date="2010-04-
    22T10:12:12.719Z" min="0" sec="0" hs="0" as="0" live="true"
    blocked="false" />
</market_price_list>
```

#### 7.1.5 System Message

```
<event_list date_generated="2011-02-24T16:33:52.849Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="154534" minute="159" event_number="100"
event_code_id="513" date="2011-02-24T16:33:24.550Z"
event_code="System message received"
  tickerstate_id="2" tickerstate="1st half" score_home="0"
  score_away="0" currentPlaytime="9520124" clockRunning="true"
  message="Game is suspended - referee is injured" message_id="309"
/>
</event_list>
```

##### > Outdated

The format below is still supported for compatibility reasons but should not be used any longer.

```
<event_list date_generated="2010-12-06T13:59:00.506Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="136806" minute="161" event_number="12" event_code_id="513"
    date="2010-12-06T13:48:53.152Z" event_code="System message received"
    tickerstate_id="2" tickerstate="1st half" score_home="2"
    score_away="2" seconds="9658" currentPlaytime="9658240"
    clockRunning="true"/>
</event_list>
<message_list date_generated="2010-12-06T13:59:00.512Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <message game_id="136806" date="2010-12-06T13:48:53.152Z" message="Game
is
  suspended - players are fighting" message_id="308" event_number="12"/>
</message_list>
```

A System Message is always combined with an event, linked together via game\_id and event\_number. Please refer to chapter 8.9 *System Message Mapping* for all possible System Messages.

#### 7.1.6 Game Condition

```
<event_list date_generated="2011-02-24T16:33:58.750Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="154534" minute="159" event_number="102"
event_code_id="258" date="2011-02-24T16:33:30.438Z" event_code="Game
conditions changed"
  tickerstate_id="2" tickerstate="1st half"
score_home="0"
```



```

        score_away="0"          currentPlaytime="9526012" clockRunning="true"
        attendance_id="1"    attendance="medium" pitch_condition_id="4"
        pitch_condition="regular" weather_condition_id="14"
        weather_condition="sunny"/>
</event_list>

```

> Outdated

The format below is still supported for compatibility reasons but should not be used any longer:

```

<event_list date_generated="2010-12-06T13:54:09.947Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <event game_id="136806" minute="157" event_number="11" event_code_id="258"
    date="2010-12-06T13:44:02.636Z" event_code="Game conditions changed"
    tickerstate_id="2" tickerstate="1st half" score_home="2"
    score_away="2" seconds="9367" currentPlaytime="9367725"
    clockRunning="true"/>
</event_list>
<game_condition_list date_generated="2010-12-06T13:54:09.953Z" pusher_id="3"
  xmlns="http://rball.com/eventpusher/data/xmlbeans">
  <game_condition game_id="136806" attendance_id="1" attendance="medium"
    pitch_condition_id="4" pitch_condition="regular"
    weather_condition_id="14" weather_condition="sunny" date="2010-12-
    06T13:54:09.956Z" event_number="11"/>
</game_condition_list>

```

A Game Condition is always combined with an event, linked together via game\_id and event\_number. Please refer to chapter 8.6 *Game Condition Mapping* for detailed description of pitch condition, weather condition and attendance.

### 7.1.7 Player Information

```

<player_list date_generated="2010-04-22T08:15:47.954Z" pusher_id="1">
  <player id="3898" match_name="C. Gratzel" country_id="43" country="Austria"
    position_id="0" position="Goal keeper" changetime="2010-04-
    22T08:14:50.480Z">
    <team_player team_id="412" rating_id="0" rating="Unrated"
      jersey_number="1" />
  </player>
  <player id="390imported9" match_name="I. Szabics" country_id="43"
country="Austria" position_id="3" position="Attacker" changetime="2010-
04-
    22T08:14:50.480Z">
    <team_player team_id="412" rating_id="1" rating="Premium"
      jersey_number="11" />
  </player>
</player_list>

```

### 7.1.8 Game Possession Statistics

```

<event_list date_generated="2016-11-03T07:10:01.573Z" pusher_id="0">
  <event game_id="569687" minute="2" event_number="49"
    event_code_id="1051" date="2016-11-03T07:10:01.537Z" event_code="Safe
    Home" tickerstate_id="2" tickerstate="1st half" score_home="0" score_away="0"
    statistics="1063=57 2087=43" currentPlaytime="65347" clockRunning="true"/>

```

</event\_list>

### 7.1.9 Runner on Base

```
<event_list date_generated="2018-11-22T12:06:19.665Z" pusher_id="0">
  <event game_id="982884" minute="0" event_number="33"
    event_code_id="232" date="2018-11-22T12:06:19.665Z" event_code="Runner On
    Base" tickerstate_id="2601" tickerstate="Inning 1" score_home="0" score_away="0"
    seconds="10" currentPlaytime="10717" clockRunning="true" score="1873=0
    2897=0 1860=0 2884=0 1868=0 2892=1" value_event_data="15=46874
    42=356728 43=Justin_Turner 44=10"/>
</event_list>
```

Value event types are only shown for loaded bases. Please refer to chapter 8.16.12 *Runner on Base Value Event* for detailed information.

## 7.2 Http Pull Interface

The Http pull interface is an additional interface to offer a communication channel to RunningBall when an Http XML data feed is used, as the Http XML feed is a push feed only. The Http pull interface is tightly coupled with the Http XML. The Http interface is a SOAP web service. The return data of the methods will be XML documents which fit the data provided in the Http XML data feed.

The following methods are offered in the Http pull interface:

- > login
- > logout
- > getFixtures
- > getFixturesByIds
- > getSportsFixturesById
- > getSportsFixtures
- > bookGames
- > revokeGames
- > getAllEventsForSingleGame
- > getAllEventsForGameList
- > getEventsByTime
- > getEventsFromEventNumber
- > getGameConditions
- > getGameMessages

The Http pull interface URL is available upon request at Runningball Feed Support.

### 7.2.1 Error Codes

The table below provides an overview of errors that may be returned by the service methods. Please be aware that the error codes are just returned as plain numbers.

| ID         | Description  |
|------------|--|
| <b>0</b>   | OK (only returned if no XML document is returned, e.g. bookGames).   |
| <b>34</b>  | Session does not exist (i.e. the handed over session ID is invalid). |
| <b>38</b>  | Session is not active (session was found but already logged out).    |
| <b>45</b>  | Invalid session (handed over session ID is null).                    |
| <b>100</b> | General error (unspecified).   |
| <b>106</b> | The given parameters are invalid.                                    |

**Table 37 – Http Pull Interface – General Error Codes**

### 7.2.2 Method “login”

This method is used to authenticate the service and to retrieve the session ID which is required for any further interaction.

#### **Input parameters:**

- > username (String)
- > password (String)

#### **Return value:**

This method returns a valid session ID in case the login was successful. In any other case the appropriate error code will be returned. The error code is a number smaller than or equal to 100.

| ID        | Description  |
|-----------|--|
| <b>1</b>  | Version error (would be internal on our side).   |
| <b>32</b> | Invalid login (caused by a wrong username or password).  |
| <b>39</b> | Login user not active (account blocked or deactivated).  |
| <b>54</b> | Password change required (should never happen as the passwords of these accounts will never expire). |

**Table 38 – Http Pull Interface – Login Error Codes**

### 7.2.3 Method “logout”

In case the client implementation is stopped on the customer side, a logout has to be called so that the old user session is closed.

#### **Input parameters:**

- > sessionId (String)

#### **Return value:**

Returns 0 if the logout was successful or an error code otherwise.

#### 7.2.4 Method "getFixtures"

This method returns an XML document which contains a game list for a requested time frame.

**Input parameters:**

- > sessionId (String)
- > dateFrom (long – EPOCH timestamp)
- > dateTo (long – EPOCH timestamp)

**Return value:**

An XML document including the fixtures for the requested time frame. The format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.2 *Game List*).

#### 7.2.5 Method "getFixturesByIds"

This method returns an XML document which contains a game XML for the handed over IDs.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

An XML document including the fixtures for the requested game IDs. The format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.2 *Game List*).

#### 7.2.6 Method "getSportsFixturesByIds"

This method returns an XML document which contains a game XML for the handed over Ids with the given sportsIds.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])
- > sportsIds(short[])

#### 7.2.7 Method "getSportsFixtures"

This method returns an XML document which contains a game list for a requested time frame.

**Input parameters:**

- > sessionId (String)
- > dateFrom (long – EPOCH timestamp)
- > dateTo (long – EPOCH timestamp)
- > sportsIds (short [])

**Return value:**

An XML document including the fixtures for the requested time frame. The format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.2 *Game List*).

### 7.2.8 Method "bookGames"

With this method the handed over games will be booked, so that the live feed will deliver the data.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

Returns 0 if the booking was successful or an error code otherwise.

| Error                       | Description   |
|-----------------------------|---|
| <b>0 OK</b>                 | All handed over game IDs have been booked successfully. |
| <b>56 INVALID TICKER ID</b> | One of the handed over IDs is not a valid RB game ID.   |
| <b>57 INVALID ID</b>        | The handed over game IDs are null or an empty array.    |
| <b>100 GENERAL ERROR</b>    | Undefined internal error.                               |

Table 39 – Http Pull Interface – BookGames Codes

### 7.2.9 Method "revokeGames"

With this method a list of games can be unbooked. Unbooking a game is only possible as long as the game has not started.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

Returns 0 if the revoking was successful or an error code otherwise.

| Error                       | Description   |
|-----------------------------|---|
| <b>0 OK</b>                 | All handed over game IDs have been unbooked successfully. |
| <b>56 INVALID TICKER ID</b> | One of the handed over IDs is not a valid RB match ID.    |
| <b>57 INVALID ID</b>        | The handed over game IDs are null or an empty array.      |
| <b>100 GENERAL ERROR</b>    | Undefined internal error.                                 |

Table 40 - Http Pull Interface – RevokeGames Codes

#### 7.2.10 Method "getAllEventsForSingleGame"

This method returns an XML document containing all events for the handed over game.

**Input parameters:**

- > sessionId (String)
- > gameId (int)

**Return value:**

An XML document including all events for the requested game; the format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.3 *Sports Ticker Event*).

#### 7.2.11 Method "getAllEventsForGameList"

This method returns an XML document containing all events for the handed over game list.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

An XML document including all events for the requested game list; the format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.3 *Sports Ticker Event*).

#### 7.2.12 Method "getEventsByTime"

This methods returns an XML document containing all events of the handed over game list for the selected time frame.

**Input parameters:**

- > sessionId (String)
- > dateFrom (long – EPOCH timestamp)
- > dateTo (long – EPOCH timestamp)
- > gameIds (int[])

**Return value:**

An XML document including all events for the requested games in the defined time frame; the format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.3 *Sports Ticker Event*).

#### 7.2.13 Method "getEventsFromEventNumber"

This method returns an XML documents containing all events for the handed over game from the handed over event number.

**Input parameters:**

- > sessionId (String)
- > gameId (int)
- > eventNumber (int)

**Return value:**

An XML document including all events for the requested game starting from the handed over eventNumber; the format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.2.13 Method "getEventsFromEventNumber").

#### 7.2.14 Method "getGameConditions"

This method returns an XML document containing the game conditions for the handed over game list.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

An XML document including the game conditions for the requested games. The format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.6 *Game Condition*).

#### 7.2.15 Method "getGameMessages"

This method returns an XML document containing the game messages for the handed over game list.

**Input parameters:**

- > sessionId (String)
- > gameIds (int[])

**Return value:**

An XML document including the game messages for the requested games. The format of the XML document is the same as defined in the Http XML pushing feed (see chapter 7.1.5 *System Message*).

## 8 Mapping Information

The following subchapters provide you with an overview of the ID mappings used in the feed.

### 8.1 Event Code Mapping

#### 8.1.1 Common Events

The following events may occur on any type of data feed as they are not sports-specific.

| ID  | Event Name             | Long Description  |
|-----|------------------------|---|
| 20  | STOP_GAME              | Indicates that the game has finished.   |
| 149 | Game suspended         | The game has been suspended for undisclosed reasons.  |
| 197 | UPDATE_SCORE_START     | Start score update.   |
| 198 | UPDATE_SCORE_FINISHED  | Score update finished.  |
| 216 | STATISTIC_VERIFICATION | Statistics confirmation.  |
| 256 | CLS                    | Cancel last sent event.   |
| 257 | CLR                    | Clear events.   |
| 258 | GCC                    | Game conditions changed.  |
| 261 | SCORER                 | Event details for %RELATED_EVENT% in the %MIN%. minute changed.   |
| 262 | BP                     | Ball position event.  |
| 264 | ODD                    | Odds event (deprecated).  |
| 266 | TIME_CORRECTION_EVENT  | Correct timestamp for a missed event; see also chapter 2.4.9 <i>Time Correction Event</i> .   |
| 276 | START_GAME_CLOCK       | The (stopped) game clock is (re)started; the game is running.   |
| 277 | STOP_GAME_CLOCK        | The game clock is stopped. Time will not change until 'Start Game Clock' is sent again.   |
| 278 | ADJUST_GAME_CLOCK      | Game clock value is adjusted manually.  |
| 279 | CSTAT                  | A statistical value is cleared and an additional event with the correct action is sent (e.g. an invalid "Ace Home" event is replaced by a "Service Winner Home"). |
| 280 | CONF_PERIOD_SCORE      | Period score confirmed.   |
| 282 | TIME_ADAPTION          | Time for event %RELATED_EVENT% was adapted by %SEC% seconds.  |
| 285 | PLAYER_DATA_CONFIRMED  | Player data for %RELATED_EVENT% in the %MIN% confirmed.   |
| 513 | SYS_MSG                | System Message.   |



| ID         | Event Name                           | Long Description  |
|------------|--------------------------------------|---|
| <b>514</b> | SCOUT_IN_STADION                     | Scout in Stadium.   |
| <b>515</b> | CONNECTION_PROBLEMS<br>SCOUT_OFFLINE | Connection problems Scout offline.  |
| <b>516</b> | CONNECTION_PROBLEMS                  | Connection problems.  |
| <b>517</b> | TRANSMISSION_ONLINE                  | Transmission online.  |
| <b>520</b> | LINEUP_CHANGED                       | Line-up changed.  |
| <b>782</b> | Game cancelled                       | Automatic "Game cancelled" event after first "cancellation" System message is sent. |

**Table 41 – Common Events**

### 8.1.2 Soccer Events

| ID        | Event Name       | Long Description             |
|-----------|------------------|------------------------------|
| <b>0</b>  | Start RT1        | Start first half             |
| <b>1</b>  | Stop RT1         | Stop first half              |
| <b>2</b>  | Start RT2        | Start second half            |
| <b>3</b>  | Stop RT2         | Stop second half             |
| <b>4</b>  | Start OT1        | Start first half extra time  |
| <b>5</b>  | Stop OT1         | Stop first half extra time   |
| <b>6</b>  | Start OT2        | Start second half extra time |
| <b>7</b>  | Stop OT2         | Stop second half extra time  |
| <b>8</b>  | Start PEN        | Start penalty shootout       |
| <b>9</b>  | Stop PEN         | Stop penalty shootout        |
| <b>10</b> | Start RT1 Team 1 |                              |
| <b>11</b> | Start RT1 Team 2 |                              |
| <b>12</b> | Start RT2 Team 1 |                              |
| <b>13</b> | Start RT2 Team 2 |                              |
| <b>14</b> | Start OT1 Team 1 |                              |
| <b>15</b> | Start OT1 Team 2 |                              |
| <b>16</b> | Start OT2 Team 1 |                              |
| <b>17</b> | Start OT2 Team 2 |                              |
| <b>18</b> | Start PEN Team 1 |                              |
| <b>19</b> | Start PEN Team 2 |                              |

| ID         | Event Name               | Long Description  |
|------------|--------------------------|---|
| <b>128</b> | Safe                     | Safe  |
| <b>129</b> | Danger                   | Danger  |
| <b>132</b> | Injury Break             | Injury Break  |
| <b>133</b> | Players are coming out   | Players are coming out  |
| <b>134</b> | Players lined up         | Players lined up  |
| <b>135</b> | National anthem singing  | National anthem singing   |
| <b>136</b> | Shake hands              | Shake hands   |
| <b>137</b> | Flip coin                | Flip coin   |
| <b>138</b> | Minute of silent         | Minute of silent  |
| <b>139</b> | Prize giving ceremony    | Prize giving ceremony   |
| <b>140</b> | Photo taking             | Photo taking  |
| <b>141</b> | Game about to start      | Game about to start   |
| <b>142</b> | Missed                   | Penalty missed  |
| <b>143</b> | PRC                      | Possible red card   |
| <b>144</b> | PPEN                     | Possible penalty  |
| <b>145</b> | No RC                    | No RC after PRC   |
| <b>146</b> | No Pen                   | No PEN after PPEN   |
| <b>147</b> | Retake Pen               | Retake Penalty  |
| <b>148</b> | Restart                  | Restart game (eg after injury break)                                  |
| <b>150</b> | Next Penalty Scorer      |   |
| <b>187</b> | Goal under Investigation | Goal under investigation  |
| <b>207</b> | Possible Free Kick       |   |
| <b>208</b> | No Free Kick             |   |
| <b>209</b> | Referee Ball             |   |
| <b>226</b> | Possible Card            |   |
| <b>227</b> | No Card                  |   |
| <b>228</b> | Possible TI              | Possible throw in   |
| <b>229</b> | No TI                    | No throw in   |
| <b>260</b> | Extra Time               | Indicates the extra time.   |
| <b>283</b> | SUB_UPDATE               | Substitution details for %RELATED_EVENT% in the %MIN%. minute changed |

| ID          | Event Name                | Long Description   |
|-------------|---------------------------|--|
| <b>287</b>  | Assist                    | Assist details for %RELATED_EVENT% in minute %MIN% changed |
| <b>524</b>  | Jersey Changed            | Jersey colours updated                                     |
| <b>532</b>  | Formation changed         | Formation information updated                              |
| <b>533</b>  | VAR started               | Video assistant referee session started                    |
| <b>534</b>  | NO VAR                    | No video assistant referee session                         |
| <b>535</b>  | VAR reason                | Video assistant referee reason sent                        |
| <b>536</b>  | VAR finished              | Video assistant referee session finished                   |
| <b>537</b>  | Penalty about to be taken | Penalty about to be taken                                  |
| <b>1024</b> | AT1                       | Attack home  |
| <b>1025</b> | CR1                       | Corner home  |
| <b>1026</b> | DAT1                      | Dangerous attack Home                                      |
| <b>1027</b> | DFK1                      | Dangerous free kick Home                                   |
| <b>1028</b> | FK1                       | Free kick Home   |
| <b>1029</b> | GOAL1                     | Goal Home  |
| <b>1030</b> | CGOAL1                    | Cancel goal Home   |
| <b>1031</b> | PEN1                      | Penalty Home   |
| <b>1032</b> | RC1                       | Red card Home  |
| <b>1034</b> | YC1                       | Yellow card Home   |
| <b>1039</b> | SHG1                      | Shot on target Home  |
| <b>1040</b> | SHB1                      | Shot off target Home                                       |
| <b>1041</b> | SHW1                      | Shot woodwork Home   |
| <b>1042</b> | F1                        | Foul Home  |
| <b>1043</b> | O1                        | Offside Home   |
| <b>1044</b> | KO1                       | Kickoff Home   |
| <b>1045</b> | YRC1                      | Yellow/red card Home                                       |
| <b>1046</b> | CYC_RC1                   | Cancel yellow/red card Home                                |
| <b>1047</b> | CRC1                      | Cancel red card Home                                       |
| <b>1048</b> | CYC1                      | Cancel yellow card Home                                    |
| <b>1049</b> | CPEN1                     | Cancel penalty Home  |
| <b>1050</b> | CCR1                      | Cancel corner Home   |

| ID          | Event Name             | Long Description                  |
|-------------|------------------------|-----------------------------------|
| <b>1051</b> | SAFE1                  | Safe Home                         |
| <b>1052</b> | DANGER1                | Danger Home                       |
| <b>1053</b> | GK1                    | Goal kick Home                    |
| <b>1054</b> | TI1                    | Throw in Home                     |
| <b>1055</b> | SUB1                   | Substitution Home                 |
| <b>1058</b> | BLOCKED1               | Shot blocked Home                 |
| <b>1059</b> | RPEN1                  | Retake penalty Home               |
| <b>1060</b> | MPEN1                  | Missed penalty Home               |
| <b>1062</b> | PPEN1                  | Possible Penalty Home             |
| <b>1064</b> | BREAKAWAY1             | Breakaway Home                    |
| <b>1065</b> | CONF_GOAL1             | Goal confirmation Home            |
| <b>1066</b> | PCR1                   | Possible corner Home              |
| <b>1067</b> | NCR1                   | No corner Home                    |
| <b>1068</b> | CONF_YC1               | Yellow card confirmed Home        |
| <b>1069</b> | CONF_YC_RC1            | Yellow/red card confirmed Home    |
| <b>1070</b> | CONF_RC1               | Red card confirmed Home           |
| <b>1071</b> | PFK1                   | Possible free kick Home           |
| <b>1072</b> | NEXT_PEN1              | Penalty Shootout Home Team's turn |
| <b>1078</b> | EXPECTED_GOAL1         | Expected goal Home                |
| <b>1079</b> | EXPTECTED_GOAL_UPDATE1 | Expected goal update Home         |
| <b>1080</b> | PLAYER_INJURED1        | Player injured Home               |
| <b>2048</b> | AT2                    | Attack Away                       |
| <b>2049</b> | CR2                    | Corner Away                       |
| <b>2050</b> | DAT2                   | Dangerous attack Away             |
| <b>2051</b> | DFK2                   | Dangerous free kick Away          |
| <b>2052</b> | FK2                    | Free kick Away                    |
| <b>2053</b> | GOAL2                  | Goal Away                         |
| <b>2054</b> | CGOAL2                 | Cancel goal Away                  |
| <b>2055</b> | PEN2                   | Penalty Away                      |
| <b>2056</b> | RC2                    | Red card Away                     |

| ID          | Event Name  | Long Description               |
|-------------|-------------|--------------------------------|
| <b>2058</b> | YC2         | Yellow card Away               |
| <b>2063</b> | SHG2        | Shot on target Away            |
| <b>2064</b> | SHB2        | Shot off target Away           |
| <b>2065</b> | SHW2        | Shot woodwork Away             |
| <b>2066</b> | F2          | Foul Away                      |
| <b>2067</b> | O2          | Offside Away                   |
| <b>2068</b> | KO2         | Kickoff Away                   |
| <b>2069</b> | YRC2        | Yellow/red card Away           |
| <b>2070</b> | CYC_RC2     | Cancel yellow/red card Away    |
| <b>2071</b> | CRC2        | Cancel red card Away           |
| <b>2072</b> | CYC2        | Cancel yellow card Away        |
| <b>2073</b> | CPEN2       | Cancel penalty Away            |
| <b>2074</b> | CCR2        | Cancel corner Away             |
| <b>2075</b> | SAFE2       | Safe Away                      |
| <b>2076</b> | DANGER2     | Danger Away                    |
| <b>2077</b> | GK2         | Goal kick Away                 |
| <b>2078</b> | TI2         | Throw in Away                  |
| <b>2079</b> | SUB2        | Substitution Away              |
| <b>2082</b> | BLOCKED2    | Shot blocked Away              |
| <b>2083</b> | RPEN2       | Retake penalty Away            |
| <b>2084</b> | MPEN2       | Missed penalty Away            |
| <b>2086</b> | PPEN2       | Possible Penalty Away          |
| <b>2088</b> | BREAKAWAY2  | Breakaway Away                 |
| <b>2089</b> | CONF_GOAL2  | Goal confirmation Away         |
| <b>2090</b> | PCR2        | Possible corner Away           |
| <b>2091</b> | NCR2        | No corner Away                 |
| <b>2092</b> | CONF_YC2    | Yellow card confirmed Away     |
| <b>2093</b> | CONF_YC_RC2 | Yellow/red card confirmed Away |
| <b>2094</b> | CONF_RC2    | Red card confirmed Away        |
| <b>2095</b> | PFK2        | Possible free kick Away        |

| ID          | Event Name            | Long Description                  |
|-------------|-----------------------|-----------------------------------|
| <b>2096</b> | NEXT_PEN2             | Penalty Shootout Away Team's turn |
| <b>2102</b> | EXPECTED_GOAL2        | Expected goal Away                |
| <b>2103</b> | EXPECTED_GOAL_UPDATE2 | Expected goal update Away         |
| <b>2104</b> | PLAYER_INJURED2       | Player injured Away               |

**Table 42 – Soccer Event Code ID Mappings**

### 8.1.3 Basketball Events

| ID         | Event Name            | Long Description  |
|------------|-----------------------|---|
| <b>0</b>   | START_RT1             | Start 1 <sup>st</sup> half*   |
| <b>1</b>   | STOP_RT1              | Stop 1 <sup>st</sup> half*  |
| <b>2</b>   | START_RT2             | Start 2 <sup>nd</sup> half*   |
| <b>3</b>   | STOP_RT2              | Stop 2 <sup>nd</sup> half*<br>* Note: Only NCAA games are played in halves. These events only apply to games with the corresponding league parameter set to 'true'. See also chapter 8.15.2 <i>Basketball</i> . |
| <b>31</b>  | START_Q1              | Start 1 <sup>st</sup> quarter   |
| <b>32</b>  | START_Q2              | Start 2 <sup>nd</sup> quarter   |
| <b>33</b>  | START_Q3              | Start 3 <sup>rd</sup> quarter   |
| <b>34</b>  | START_Q4              | Start 4 <sup>th</sup> quarter   |
| <b>35</b>  | START_OVERTIME        | Start overtime  |
| <b>36</b>  | STOP_QUARTER          | Stop quarter  |
| <b>37</b>  | STOP_OVERTIME         | Stop overtime   |
| <b>101</b> | STOP_Q1               | Stop 1 <sup>st</sup> quarter  |
| <b>102</b> | STOP_Q2               | Stop 2 <sup>nd</sup> quarter  |
| <b>103</b> | STOP_Q3               | Stop 3 <sup>rd</sup> quarter  |
| <b>104</b> | STOP_Q4               | Stop 4 <sup>th</sup> quarter  |
| <b>129</b> | DANGER                | Danger  |
| <b>135</b> | ANTHEM                | National anthem singing   |
| <b>138</b> | MINUTE_OF_SILENT      | Minute of silence   |
| <b>139</b> | PRICE_GIVING_CEREMONY | Price giving ceremony   |
| <b>157</b> | TIMEOUT               | Timeout   |

| ID          | Event Name           | Long Description  |
|-------------|----------------------|---|
| <b>159</b>  | NO_FT                | No free throw   |
| <b>160</b>  | PLAYERS_WARMING_UP   | Players warming up  |
| <b>161</b>  | FINAL_CALL           | Final call to the court by referees                                   |
| <b>171</b>  | PLAYERS_INTRODUCTION | Players are introduced  |
| <b>172</b>  | THREE_MINUTE_WARNING | 3 minute warning by referee   |
| <b>178</b>  | PFT                  | Possible free throw   |
| <b>280</b>  | CONF_PERIOD_SCORE    | Score of last period confirmed  |
| <b>283</b>  | SUB_UPDATE           | Substitution details for %RELATED_EVENT% in the %MIN%. minute changed |
| <b>524</b>  | Jersey Changed       | Jersey colors updated   |
| <b>1093</b> | BB_FG_2PT1           | 2 Points Home   |
| <b>1094</b> | BB_FG_3PT1           | 3 Points Home   |
| <b>1095</b> | BB_TI1               | Throw in Home   |
| <b>1096</b> | BB_FOUL1             | Foul Home   |
| <b>1097</b> | BB_FOULED_OUT1       | Fouled out Home   |
| <b>1099</b> | BB_ONE_FT1           | 1 free throw Home   |
| <b>1100</b> | BB_TWO_FT1           | 2 three throws Home   |
| <b>1101</b> | BB_FG_1PT1           | 1 Point Home  |
| <b>1102</b> | BB_TIME1             | Timeout Home  |
| <b>1104</b> | BB_TURNOVER1         | Turnover Home   |
| <b>1105</b> | BB_STEAL1            | Steal Home  |
| <b>1106</b> | BB_ROFF1             | Offensive rebound Home  |
| <b>1107</b> | BB_RDEF1             | Defensive rebound Home  |
| <b>1108</b> | BB_BALL1             | Ball Home   |
| <b>1110</b> | BB_THREE_FT1         | 3 free throws Home  |
| <b>1111</b> | BB_CFG_1PT1          | Cancel 1 point Home   |
| <b>1112</b> | BB_CFG_2PT1          | Cancel 2 points Home  |
| <b>1113</b> | BB_CFG_3PT1          | Cancel 3 points Home  |
| <b>1114</b> | BB_MISSED_FT1        | Missed free throw Home  |
| <b>1115</b> | BB_DISQ_PLAYER1      | Disqualified player home  |
| <b>1116</b> | BB_TI_FOUL1          | Tech./Int Home  |

| ID          | Event Name      | Long Description              |
|-------------|-----------------|-------------------------------|
| <b>1117</b> | BB_P_FOUL1      | Personal foul Home            |
| <b>1120</b> | BB_CROFF1       | Cancel offensive rebound Home |
| <b>1121</b> | BB_CRDEF1       | Cancel defensive rebound Home |
| <b>1122</b> | BB_INJ_OUT1     | Player injured Home           |
| <b>1123</b> | BB_BIG1         | Player back in game Home      |
| <b>1127</b> | BB_CONF_POINT1  | Point confirmation Home       |
| <b>1128</b> | BB_JB_WIN1      | Jump ball winner Home         |
| <b>1129</b> | BB_POSS_ARROW1  | Possession arrow Home         |
| <b>1130</b> | BB_MISSED_2PT1  | Missed 2 point attempt Home   |
| <b>1131</b> | BB_MISSED_3PT1  | Missed 3 point attempt Home   |
| <b>2117</b> | BB_FG_2PT2      | 2 points Away                 |
| <b>2118</b> | BB_FG_3PT2      | 3 Points Away                 |
| <b>2119</b> | BB_TI2          | Throw in Away                 |
| <b>2120</b> | BB_FOUL2        | Foul Away                     |
| <b>2121</b> | BB_FOULED_OUT2  | Fouled out Away               |
| <b>2123</b> | BB_ONE_FT2      | 1 free throw Away             |
| <b>2124</b> | BB_TWO_FT2      | 2 three throws Away           |
| <b>2125</b> | BB_FG_1PT2      | 1 Point Away                  |
| <b>2126</b> | BB_TIME2        | Timeout Away                  |
| <b>2128</b> | BB_TURNOVER2    | Turnover Away                 |
| <b>2129</b> | BB_STEAL2       | Steal Away                    |
| <b>2130</b> | BB_ROFF2        | Offensive rebound Away        |
| <b>2131</b> | BB_RDEF2        | Defensive rebound Away        |
| <b>2132</b> | BB_BALL2        | Ball Away                     |
| <b>2134</b> | BB_THREE_FT2    | 3 free throws Away            |
| <b>2135</b> | BB_CFG_1PT2     | Cancel 1 point Away           |
| <b>2136</b> | BB_CFG_2PT2     | Cancel 2 point Away           |
| <b>2137</b> | BB_CFG_3PT2     | Cancel 3 point Away           |
| <b>2138</b> | BB_MISSED_FT2   | Missed free throw Away        |
| <b>2139</b> | BB_DISQ_PLAYER2 | Disqualified player Away      |



| ID          | Event Name     | Long Description              |
|-------------|----------------|-------------------------------|
| <b>2140</b> | BB_TI_FOUL2    | Tech./Int Away                |
| <b>2141</b> | BB_P_FOUL2     | Personal foul Away            |
| <b>2144</b> | BB_CROFF2      | Cancel offensive rebound Away |
| <b>2145</b> | BB_CRDEF2      | Cancel defensive rebound Away |
| <b>2146</b> | BB_INJ_OUT2    | Player injured Away           |
| <b>2147</b> | BB_BIG2        | Player back in game Away      |
| <b>2151</b> | BB_CONF_POINT2 | Point confirmation Away       |
| <b>2152</b> | BB_JB_WIN2     | Jump ball winner Away         |
| <b>2153</b> | BB_POSS_ARROW2 | Possession arrow Away         |
| <b>2154</b> | BB_MISSED_2PT2 | Missed 2 point attempt Away   |
| <b>2155</b> | BB_MISSED_3PT2 | Missed 3 point attempt Away   |

**Table 43 – Basketball Event Code ID Mappings**

#### 8.1.4 Ice Hockey Events

| ID         | Event Name         | Long Description                            |
|------------|--------------------|---|
| <b>18</b>  | START_PEN1         | Start penalty shootout, first penalty: Home |
| <b>19</b>  | START_PEN2         | Start penalty shootout, first penalty: Away |
| <b>35</b>  | START_OT           | Start overtime                              |
| <b>37</b>  | STOP_OT            | Stop overtime                               |
| <b>60</b>  | START_P1           | Start 1 <sup>st</sup> period                |
| <b>61</b>  | STOP_P1            | Stop 1 <sup>st</sup> period                 |
| <b>62</b>  | START_P2           | Start 2 <sup>nd</sup> period                |
| <b>63</b>  | STOP_P2            | Stop 2 <sup>nd</sup> period                 |
| <b>64</b>  | START_P3           | Start 3 <sup>rd</sup> period                |
| <b>65</b>  | STOP_P3            | Stop 3 <sup>rd</sup> period                 |
| <b>128</b> | SAFE               | Safe  |
| <b>132</b> | IN_BREAK           | Game suspended – Player injured             |
| <b>133</b> | PLAYERS_COMING_OUT | Players are coming out                      |
| <b>134</b> | LINE_UP            | Players lined up                            |
| <b>135</b> | ANTHEM             | Nation anthem singing                       |

| ID          | Event Name                | Long Description               |
|-------------|---------------------------|--------------------------------|
| <b>136</b>  | SHAKE_HANDS               | Shake hands                    |
| <b>137</b>  | FLIP_COIN                 | Coin flipping                  |
| <b>138</b>  | MINUTE_OF_SILENT          | Minute of silent               |
| <b>139</b>  | PRIZE_GIVING_CEREMONY     | Prize giving ceremony          |
| <b>140</b>  | PHOTO_TAKING              | Photo taking                   |
| <b>141</b>  | GAME_ABOUT_TO_START       | Game about to start            |
| <b>142</b>  | MISSED                    | Missed                         |
| <b>144</b>  | PPEN                      | Possible PEN                   |
| <b>146</b>  | NO_PEN                    | No PEN                         |
| <b>147</b>  | RETAKE_PEN                | Retake PEN                     |
| <b>148</b>  | GC                        | Restart                        |
| <b>149</b>  | GAME_SUSPENDED            | Game suspended                 |
| <b>150</b>  | NEXT_PEN_SCORER           | Next scorer                    |
| <b>157</b>  | TIMEOUT                   | Timeout                        |
| <b>160</b>  | PLAYERS_WARMING_UP        | Players warming up             |
| <b>171</b>  | PLAYERS_INTRODUCTION      | Players introduction           |
| <b>174</b>  | POSSIBLE_SUSPENSION       | Possible Suspension            |
| <b>175</b>  | NO_SUSPENSION             | No Suspension                  |
| <b>187</b>  | GOAL_UNDER_INVESTIGATION  | Goal under investigation       |
| <b>195</b>  | IH_FO                     | Faceoff                        |
| <b>197</b>  | UPDATE_SCORE_START        | Updating score                 |
| <b>198</b>  | UPDATE_SCORE_FINISHED     | Score updated                  |
| <b>212</b>  | FO Done                   | Faceoff done                   |
| <b>213</b>  | FO Undecided              | Faceoff undecided              |
| <b>282</b>  | TIME_ADAPTION             | Event time adaption            |
| <b>524</b>  | Jersey Changed            | Jersey colors updated          |
| <b>537</b>  | Penalty about to be taken | Penalty shot about to be taken |
| <b>1475</b> | IH_GOAL1                  | Goal Home                      |
| <b>1476</b> | IH_PEN_SH1                | Penalty Shot Home              |
| <b>1477</b> | IH_M_PEN_SH1              | Missed Penalty Shot Home       |

| ID          | Event Name       | Long Description               |
|-------------|------------------|--------------------------------|
| <b>1478</b> | IH_R_PEN_SH1     | Retake Penalty Shot Home       |
| <b>1479</b> | IH_2M1           | 2 Minute Penalty Home          |
| <b>1480</b> | IH_5M1           | 5 Minute Penalty Home          |
| <b>1481</b> | IH_10M1          | 10 Minute Penalty Home         |
| <b>1482</b> | IH_P2M1          | +2 Minute Penalty Home         |
| <b>1483</b> | IH_P10M1         | +10 Minute Penalty Home        |
| <b>1484</b> | IH_GMP1          | Game Misconduct Penalty Home   |
| <b>1485</b> | IH_SH1           | Shot Home                      |
| <b>1487</b> | IH_FOW1          | Face-off Won Home              |
| <b>1488</b> | IH_OFFSIDE1      | Offside Home                   |
| <b>1489</b> | IH_ICING1        | Icing Home                     |
| <b>1490</b> | IH_TIME1         | Timeout Home                   |
| <b>1492</b> | IH_2MPO1         | 2 Minute Penalty Over Home     |
| <b>1493</b> | IH_5MPO1         | 5 Minute Penalty Over Home     |
| <b>1494</b> | IH_CGOAL1        | Cancel Goal Home               |
| <b>1495</b> | IH_CPEN_SH1      | Cancel Penalty Shot Home       |
| <b>1496</b> | IH_C2M1          | Cancel 2 Minute Penalty Home   |
| <b>1497</b> | IH_C5M1          | Cancel 5 Minute Penalty Home   |
| <b>1499</b> | IH_CGMP1         | Game Misconduct Penalty Home   |
| <b>1500</b> | IH_PR1           | Penalty Running Home           |
| <b>1501</b> | IH_PRO1          | Penalty Running Over Home      |
| <b>1502</b> | IH_GK_OFF1       | Goalkeeper Off Home            |
| <b>1504</b> | IH_GK_ON1        | Goalkeeper On Home             |
| <b>1505</b> | IH_ZONE_AT_HALF1 | Attacking Half Home            |
| <b>1508</b> | IH_P5M1          | +5 Minute Penalty Home         |
| <b>1509</b> | IH_CP2M1         | Cancel +2 Minute Penalty Home  |
| <b>1510</b> | IH_CP5M1         | Cancel +5 Minute Penalty Home  |
| <b>1511</b> | IH_C10M1         | Cancel 10 Minute Penalty Home  |
| <b>1512</b> | IH_CP10M1        | Cancel +10 Minute Penalty Home |
| <b>1513</b> | IH_CONF_GOAL1    | Goal confirmation Home         |

| ID          | Event Name       | Long Description                  |
|-------------|------------------|-----------------------------------|
| <b>1514</b> | IH_NEXT_PEN1     | Penalty Shootout Home Team's turn |
| <b>2499</b> | IH_GOAL2         | Goal Away                         |
| <b>2500</b> | IH_PEN_SH2       | Penalty Shot Away                 |
| <b>2501</b> | IH_M_PEN_SH2     | Missed Penalty Shot Away          |
| <b>2502</b> | IH_R_PEN_SH2     | Retake Penalty Shot Away          |
| <b>2503</b> | IH_2M2           | 2 Minute Penalty Away             |
| <b>2504</b> | IH_5M2           | 5 Minute Penalty Away             |
| <b>2505</b> | IH_10M2          | 10 Minute Penalty Away            |
| <b>2506</b> | IH_P2M2          | +2 Minute Penalty Away            |
| <b>2507</b> | IH_P10M2         | +10 Minute Penalty Away           |
| <b>2508</b> | IH_GMP2          | Game Misconduct Penalty Away      |
| <b>2509</b> | IH_SH2           | Shot Away                         |
| <b>2511</b> | IH_FOW2          | Face-off Won Away                 |
| <b>2512</b> | IH_OFFSIDE2      | Offside Away                      |
| <b>2513</b> | IH_ICING2        | Icing Away                        |
| <b>2514</b> | IH_TIME2         | Timeout Away                      |
| <b>2516</b> | IH_2MPO2         | 2 Minute Penalty Over Away        |
| <b>2517</b> | IH_5MPO2         | 5 Minute Penalty Over Away        |
| <b>2518</b> | IH_CGOAL2        | Cancel Goal Away                  |
| <b>2519</b> | IH_CPEN_SH2      | Cancel Penalty Shot Away          |
| <b>2520</b> | IH_C2M2          | Cancel 2 Minute Penalty Away      |
| <b>2521</b> | IH_C5M2          | Cancel 5 Minute Penalty Away      |
| <b>2523</b> | IH_CGMP2         | Game Misconduct Penalty Away      |
| <b>2524</b> | IH_PR2           | Penalty Running Away              |
| <b>2525</b> | IH_PRO2          | Penalty Running Over Away         |
| <b>2526</b> | IH_GK_OFF2       | Goalkeeper Off Away               |
| <b>2528</b> | IH_GK_ON2        | Goalkeeper On Away                |
| <b>2529</b> | IH_ZONE_AT_HALF2 | Attacking Half Away               |
| <b>2532</b> | IH_P5M1          | +5 Minute Penalty Away            |
| <b>2533</b> | IH_CP2M1         | Cancel +2 Minute Penalty Away     |

| ID          | Event Name    | Long Description                  |
|-------------|---------------|-----------------------------------|
| <b>2534</b> | IH_CP5M2      | Cancel +5 Minute Penalty Away     |
| <b>2535</b> | IH_C10M2      | Cancel 10 Minute Penalty Away     |
| <b>2536</b> | IH_CP10M2     | Cancel +10 Minute Penalty Away    |
| <b>2537</b> | IH_CONF_GOAL2 | Goal confirmation Away            |
| <b>2538</b> | IH_NEXT_PEN2  | Penalty Shootout Away Team's turn |

**Table 44 – Ice Hockey Event Code ID Mappings**

#### 8.1.5 Volleyball Events

| ID         | Event Name            | Long Description                |
|------------|-----------------------|---------------------------------|
| <b>41</b>  | START_SET_1           | Start 1 <sup>st</sup> set       |
| <b>42</b>  | START_SET_2           | Start 2 <sup>nd</sup> set       |
| <b>43</b>  | START_SET_3           | Start 3 <sup>rd</sup> set       |
| <b>44</b>  | START_SET_4           | Start 4 <sup>th</sup> set       |
| <b>45</b>  | START_SET_5           | Start 5 <sup>th</sup> set       |
| <b>46</b>  | STOP_SET              | Stop set                        |
| <b>54</b>  | START_SET_6           | Start 6 <sup>th</sup> set       |
| <b>55</b>  | START_SET_7           | Start 7 <sup>th</sup> set       |
| <b>56</b>  | START_GOLDEN_SET      | Start golden set                |
| <b>128</b> | SAFE                  | Safe                            |
| <b>129</b> | DANGER                | Danger                          |
| <b>132</b> | INJ_BREAK             | Game suspended - Player injured |
| <b>134</b> | LINE_UP               | Players lined up                |
| <b>135</b> | ANTHEM                | Nation anthem singing           |
| <b>136</b> | SHAKE_HANDS           | Shake hands                     |
| <b>137</b> | FLIP_COIN             | Coin flipping                   |
| <b>138</b> | MINUTE_OF_SILENT      | Minute of silence               |
| <b>139</b> | PRIZE_GIVING_CEREMONY | Prize giving ceremony           |
| <b>141</b> | GAME_ABOUT_TO_START   | Game about to start             |
| <b>157</b> | TIMEOUT               | Timeout                         |
| <b>160</b> | PLAYERS_WARMING_UP    | Players warming up              |
| <b>171</b> | PLAYERS_INTRODUCTION  | Players introduction            |

| ID          | Event Name                | Long Description                 |
|-------------|---------------------------|----------------------------------|
| <b>180</b>  | RALLY_OVER_5              | Rally over 5 possession changes  |
| <b>181</b>  | RALLY_OVER_10             | Rally over 10 possession changes |
| <b>182</b>  | RALLY_OVER_15             | Rally over 15 possession changes |
| <b>187</b>  | POINT_UNDER_INVESTIGATION | Point under investigation        |
| <b>197</b>  | UPDATE_SCORE_START        | Start score update               |
| <b>198</b>  | UPDATE_SCORE_FINISHED     | Score update finished            |
| <b>199</b>  | TTO                       | Technical timeout                |
| <b>216</b>  | Statistic Confirmation    | Statistic Confirmation           |
| <b>217</b>  | WARM_UP_AT_NET            | Warming up at the net            |
| <b>218</b>  | PDISQ                     | Possible disqualification        |
| <b>219</b>  | No DISQ                   | No disqualification              |
| <b>230</b>  | SRV_TEAM_UNKNOWN          | Unknown Team to start Service    |
| <b>524</b>  | Jersey Changed            | Jersey Changed                   |
| <b>1408</b> | VB_SERVE1                 | Service Home                     |
| <b>1409</b> | VB_KILL1                  | Kill Home                        |
| <b>1410</b> | VB_BLOCK1                 | Block Home                       |
| <b>1412</b> | VB_OUT1                   | Out Home                         |
| <b>1413</b> | VB_ERR1                   | Error Home                       |
| <b>1414</b> | VB_SRV_A1                 | Ace Home                         |
| <b>1417</b> | VB_SRV_ERR1               | Service error Home               |
| <b>1418</b> | VB_PENALTY1               | Penalty Home                     |
| <b>1419</b> | VB_EXPULSION1             | Expulsion Home                   |
| <b>1420</b> | VB_DISQ1                  | Disqualification Home            |
| <b>1421</b> | VB_POINT1                 | Point Home                       |
| <b>1422</b> | VB_TIME1                  | Timeout Home                     |
| <b>1423</b> | VB_SET1                   | Set Home                         |
| <b>1425</b> | VB_CPENALTY1              | Cancel Penalty Home              |
| <b>1426</b> | VB_CEXPULSION1            | Cancel Expulsion Home            |
| <b>1427</b> | VB_CDISQ1                 | Cancel Disqualification Home     |
| <b>1428</b> | VB_CPOINT1                | Cancel point Home                |

| ID          | Event Name         | Long Description             |
|-------------|--------------------|------------------------------|
| <b>1429</b> | VB_SRV_IN1         | Serve in Home                |
| <b>1431</b> | VB_CONF_POINT1     | Point confirmation Home      |
| <b>1432</b> | VB_PEN_POINT1      | Penalty Point Home           |
| <b>1433</b> | VB_UNDEF_METHOD_P1 | Point (unknown method) Home  |
| <b>1434</b> | VB_START_SRV1      | Start service Home           |
| <b>1435</b> | VB_BALL_POSS1      | Ball possession Home         |
| <b>2432</b> | VB_SERVE2          | Service Away                 |
| <b>2433</b> | VB_KILL2           | Kill Away                    |
| <b>2434</b> | VB_BLOCK2          | Block Away                   |
| <b>2436</b> | VB_OUT2            | Out Away                     |
| <b>2437</b> | VB_ERR2            | Error Away                   |
| <b>2438</b> | VB_SRV_A2          | Ace Away                     |
| <b>2441</b> | VB_SRV_ERR2        | Service error Away           |
| <b>2442</b> | VB_PENALTY2        | Penalty Away                 |
| <b>2443</b> | VB_EXPULSION2      | Expulsion Away               |
| <b>2444</b> | VB_DISQ2           | Disqualification Away        |
| <b>2445</b> | VB_POINT2          | Point Away                   |
| <b>2446</b> | VB_TIME2           | Timeout Away                 |
| <b>2447</b> | VB_SET2            | Set Away                     |
| <b>2449</b> | VB_CPENALTY2       | Cancel Penalty Away          |
| <b>2450</b> | VB_CEXPULSION2     | Cancel Expulsion Away        |
| <b>2451</b> | VB_CDISQ2          | Cancel Disqualification Away |
| <b>2452</b> | VB_CPOINT2         | Cancel point Away            |
| <b>2453</b> | VB_SRV_IN2         | Serve in Away                |
| <b>2455</b> | VB_CONF_POINT2     | Point confirmation Away      |
| <b>2456</b> | VB_PEN_POINT2      | Penalty Point Away           |
| <b>2457</b> | VB_UNDEF_METHOD_P2 | Point (unknown method) Away  |
| <b>2458</b> | VB_START_SRV2      | Start service Away           |
| <b>2459</b> | VB_BALL_POSS2      | Ball possession Away         |

**Table 45 – Volleyball Event Code ID Mappings**

### 8.1.6 Beach Volleyball Events

| ID         | Event Name                | Long Description                 |
|------------|---------------------------|----------------------------------|
| <b>41</b>  | START_SET_1               | Start 1 <sup>st</sup> set        |
| <b>42</b>  | START_SET_2               | Start 2 <sup>nd</sup> set        |
| <b>43</b>  | START_SET_3               | Start 3 <sup>rd</sup> set        |
| <b>44</b>  | START_SET_4               | Start 4 <sup>th</sup> set        |
| <b>45</b>  | START_SET_5               | Start 5 <sup>th</sup> set        |
| <b>46</b>  | STOP_SET                  | Stop set                         |
| <b>47</b>  | WO1                       | W.O. Home                        |
| <b>48</b>  | WO2                       | W.O. Away                        |
| <b>54</b>  | START_SET_6               | Start 6 <sup>th</sup> set        |
| <b>55</b>  | START_SET_7               | Start 7 <sup>th</sup> set        |
| <b>56</b>  | START_GOLDEN_SET          | Start golden set                 |
| <b>128</b> | SAFE                      | Safe                             |
| <b>129</b> | DANGER                    | Danger                           |
| <b>132</b> | INJ_BREAK                 | Game suspended - Player injured  |
| <b>134</b> | LINE_UP                   | Players lined up                 |
| <b>135</b> | ANTHEM                    | Nation anthem singing            |
| <b>136</b> | SHAKE_HANDS               | Shake hands                      |
| <b>137</b> | FLIP_COIN                 | Coin flipping                    |
| <b>138</b> | MINUTE_OF_SILENT          | Minute of silence                |
| <b>139</b> | PRIZE_GIVING_CEREMONY     | Prize giving ceremony            |
| <b>141</b> | GAME_ABOUT_TO_START       | Game about to start              |
| <b>157</b> | TIMEOUT                   | Timeout                          |
| <b>160</b> | PLAYERS_WARMING_UP        | Players warming up               |
| <b>171</b> | PLAYERS_INTRODUCTION      | Players introduction             |
| <b>180</b> | RALLY_OVER_5              | Rally over 5 possession changes  |
| <b>181</b> | RALLY_OVER_10             | Rally over 10 possession changes |
| <b>182</b> | RALLY_OVER_15             | Rally over 15 possession changes |
| <b>187</b> | POINT_UNDER_INVESTIGATION | Point under investigation        |
| <b>199</b> | TTO                       | Technical timeout                |



| ID          | Event Name             | Long Description              |
|-------------|------------------------|-------------------------------|
| <b>216</b>  | Statistic Confirmation | Statistic Confirmation        |
| <b>217</b>  | WARM_UP_AT_NET         | Warming up at the net         |
| <b>218</b>  | PDISQ                  | Possible disqualification     |
| <b>219</b>  | No DISQ                | No disqualification           |
| <b>230</b>  | SRV_TEAM_UNKNOWN       | Unknown Team to start Service |
| <b>524</b>  | Jersey Changed         | Jersey Changed                |
| <b>1408</b> | VB_SERVE1              | Service Home                  |
| <b>1409</b> | VB_KILL1               | Kill Home                     |
| <b>1410</b> | VB_BLOCK1              | Block Home                    |
| <b>1412</b> | VB_OUT1                | Out Home                      |
| <b>1413</b> | VB_ERR1                | Error Home                    |
| <b>1414</b> | VB_SRV_A1              | Ace Home                      |
| <b>1417</b> | VB_SRV_ERR1            | Service error Home            |
| <b>1418</b> | VB_PENALTY1            | Penalty Home                  |
| <b>1419</b> | VB_EXPULSION1          | Expulsion Home                |
| <b>1420</b> | VB_DISQ1               | Disqualification Home         |
| <b>1421</b> | VB_POINT1              | Point Home                    |
| <b>1422</b> | VB_TIME1               | Timeout Home                  |
| <b>1423</b> | VB_SET1                | Set Home                      |
| <b>1425</b> | VB_CPENALTY1           | Cancel Penalty Home           |
| <b>1426</b> | VB_CEXPULSION1         | Cancel Expulsion Home         |
| <b>1427</b> | VB_CDISQ1              | Cancel Disqualification Home  |
| <b>1428</b> | VB_CPOINT1             | Cancel point Home             |
| <b>1429</b> | VB_SRV_IN1             | Serve in Home                 |
| <b>1431</b> | VB_CONF_POINT1         | Point confirmation Home       |
| <b>1432</b> | VB_PEN_POINT1          | Penalty Point Home            |
| <b>1433</b> | VB_UNDEF_METHOD_P1     | Point (unknown method) Home   |
| <b>1434</b> | VB_START_SRV1          | Start service Home            |
| <b>1435</b> | VB_BALL_POSS1          | Ball possession Home          |
| <b>2432</b> | VB_SERVE2              | Service Away                  |

| ID          | Event Name         | Long Description             |
|-------------|--------------------|------------------------------|
| <b>2433</b> | VB_KILL2           | Kill Away                    |
| <b>2434</b> | VB_BLOCK2          | Block Away                   |
| <b>2436</b> | VB_OUT2            | Out Away                     |
| <b>2437</b> | VB_ERR2            | Error Away                   |
| <b>2438</b> | VB_SRV_A2          | Ace Away                     |
| <b>2441</b> | VB_SRV_ERR2        | Service error Away           |
| <b>2442</b> | VB_PENALTY2        | Penalty Away                 |
| <b>2443</b> | VB_EXPULSION2      | Expulsion Away               |
| <b>2444</b> | VB_DISQ2           | Disqualification Away        |
| <b>2445</b> | VB_POINT2          | Point Away                   |
| <b>2446</b> | VB_TIME2           | Timeout Away                 |
| <b>2447</b> | VB_SET2            | Set Away                     |
| <b>2449</b> | VB_CPENALTY2       | Cancel Penalty Away          |
| <b>2450</b> | VB_CEXPULSION2     | Cancel Expulsion Away        |
| <b>2451</b> | VB_CDISQ2          | Cancel Disqualification Away |
| <b>2452</b> | VB_CPOINT2         | Cancel point Away            |
| <b>2453</b> | VB_SRV_IN2         | Serve in Away                |
| <b>2455</b> | VB_CONF_POINT2     | Point confirmation Away      |
| <b>2456</b> | VB_PEN_POINT2      | Penalty Point Away           |
| <b>2457</b> | VB_UNDEF_METHOD_P2 | Point (unknown method) Away  |
| <b>2458</b> | VB_START_SRV2      | Start service Away           |
| <b>2459</b> | VB_BALL_POSS2      | Ball possession Away         |

**Table 46 – Beach Volleyball Event Code ID Mappings**

#### 8.1.7 Handball Events

| ID       | Event Name | Long Description           |
|----------|------------|----------------------------|
| <b>0</b> | START_RT1  | Start 1 <sup>st</sup> half |
| <b>1</b> | STOP_RT1   | Stop 1 <sup>st</sup> half  |
| <b>2</b> | START_RT2  | Start 2 <sup>nd</sup> half |
| <b>3</b> | STOP_RT2   | Stop 2 <sup>nd</sup> half  |

| ID         | Event Name              | Long Description  |
|------------|-------------------------|---|
| <b>4</b>   | START_OT1               | Start 1 <sup>st</sup> extra time                            |
| <b>5</b>   | STOP_OT1                | Stop 1 <sup>st</sup> extra time                             |
| <b>6</b>   | START_OT2               | Start 2 <sup>nd</sup> half extra time                       |
| <b>7</b>   | STOP_OT2                | Stop 2 <sup>nd</sup> half extra time                        |
| <b>10</b>  | START_RT1_1             | Start 1 <sup>st</sup> half, throw-off: Home                 |
| <b>11</b>  | START_RT1_2             | Start 1 <sup>st</sup> half, throw-off: Away                 |
| <b>12</b>  | START_RT2_1             | Start 2 <sup>nd</sup> half, throw-off: Home                 |
| <b>13</b>  | START_RT2_2             | Start 2 <sup>nd</sup> half, throw-off: Away                 |
| <b>14</b>  | START_OT1_1             | Start 1 <sup>st</sup> half of overtime, throw-off: Home     |
| <b>15</b>  | START_OT1_2             | Start 1 <sup>st</sup> half of overtime, throw-off: Away     |
| <b>16</b>  | START_OT2_1             | Start 2 <sup>nd</sup> half of overtime, throw-off: Home     |
| <b>17</b>  | START_OT2_2             | Start 2 <sup>nd</sup> half of overtime, throw-off: Away     |
| <b>37</b>  | STOP_OVERTIME           | Stop overtime   |
| <b>50</b>  | START_7M_SHOOTOUT       | Start 7m shootout   |
| <b>51</b>  | START_7M_SHOOTOUT_TEAM1 | Start 7m shootout (home)                                    |
| <b>52</b>  | START_7M_SHOOTOUT_TEAM2 | Start 7m shootout (away)                                    |
| <b>53</b>  | STOP_7M_SHOOTOUT        | Stop 7m shootout  |
| <b>87</b>  | START_2_OT1             | Start 1 <sup>st</sup> half of 2nd overtime                  |
| <b>88</b>  | START_2_OT1_1           | Start 1 <sup>st</sup> half of 2nd overtime, throw-off: Home |
| <b>89</b>  | START_2_OT1_2           | Start 1 <sup>st</sup> half of 2nd overtime, throw-off: Away |
| <b>90</b>  | STOP_2_OT1              | Stop 1 <sup>st</sup> half of 2nd overtime                   |
| <b>91</b>  | START_2_OT2             | Start 2 <sup>nd</sup> half of 2nd overtime                  |
| <b>92</b>  | START_2_OT2_1           | Start 2 <sup>nd</sup> half of 2nd overtime, throw-off: Home |
| <b>93</b>  | START_2_OT2_2           | Start 2 <sup>nd</sup> half of 2nd overtime, throw-off: Away |
| <b>94</b>  | STOP_2_OT2              | Stop 2 <sup>nd</sup> half of 2nd overtime                   |
| <b>129</b> | DANGER                  | Danger  |
| <b>132</b> | INJ_BREAK               | Game suspended – Player injured                             |
| <b>133</b> | PLAYERS_COMING_OUT      | Players are coming out                                      |
| <b>134</b> | LINE_UP                 | Players lined up  |
| <b>135</b> | ANTHEM                  | National anthem singing                                     |

| ID          | Event Name                | Long Description   |
|-------------|---------------------------|--|
| <b>136</b>  | SHAKE_HANDS               | Shake hands  |
| <b>137</b>  | FLIP_COIN                 | Coin flipping  |
| <b>138</b>  | MINUTE_OF_SILENT          | Minute of silence  |
| <b>139</b>  | PRIZE_GIVING_CEREMONY     | Prize giving ceremony  |
| <b>140</b>  | PHOTO_TAKING              | Photo taking   |
| <b>141</b>  | GAME_ABOUT_TO_START       | Game about to start  |
| <b>142</b>  | MISSED                    | Missed   |
| <b>148</b>  | GC                        | Restart  |
| <b>149</b>  | GAME_SUSPENDED            | Game suspended   |
| <b>150</b>  | NEXT_PEN_SCORER           | Next scorer  |
| <b>157</b>  | TIMEOUT                   | Timeout  |
| <b>160</b>  | PLAYERS_WARMING_UP        | Players warming up   |
| <b>171</b>  | PLAYERS_INTRODUCTION      | Players introduction   |
| <b>174</b>  | HB_SUSPENSION_SELECTION   | Possible suspension  |
| <b>175</b>  | NO_SUSP                   | No suspension  |
| <b>176</b>  | P7M                       | Possible 7 meter   |
| <b>177</b>  | NO_7M                     | No 7 meter   |
| <b>186</b>  | CLEAR_FLOOR               | Clear floor  |
| <b>197</b>  | UPDATE_SCORE_START        | Start score update   |
| <b>198</b>  | UPDATE_SCORE_FINISHED     | Score update finished  |
| <b>210</b>  | TEAMS_GREETING            | Teams greeting   |
| <b>214</b>  | TEAM_HUDDLE               | Team huddle  |
| <b>282</b>  | TIME_ADAPTION             | Time for event %RELATED_EVENT% was adapted by %SEC% seconds. |
| <b>524</b>  | JERSEY_CHANGED            | Jersey colors changed  |
| <b>537</b>  | Penalty about to be taken | 7-metre throw about to be taken                              |
| <b>1216</b> | HB_POSS1                  | Possession Home  |
| <b>1220</b> | HB_GOAL1                  | Goal Home  |
| <b>1221</b> | HB_7M1                    | 7 meter Home   |
| <b>1222</b> | HB_R7M1                   | Retake 7 meter Home  |
| <b>1223</b> | HB_7MM1                   | 7 meter missed Home  |

| ID          | Event Name    | Long Description               |
|-------------|---------------|--------------------------------|
| <b>1224</b> | HB_YC1        | Yellow card Home               |
| <b>1225</b> | HB_2M1        | 2 minutes penalty Home         |
| <b>1226</b> | HB_P2M1       | +2 minutes penalty Home        |
| <b>1227</b> | HB_RC1        | Red card Home                  |
| <b>1229</b> | HB_2MPO1      | 2 minutes penalty over Home    |
| <b>1230</b> | HB_SH1        | Shot Home                      |
| <b>1235</b> | HB_GKT1       | Goalkeeper-throw Home          |
| <b>1236</b> | HB_TI1        | Throw in Home                  |
| <b>1237</b> | HB_FT1        | Free throw Home                |
| <b>1241</b> | HB_TTO1       | Team timeout Home              |
| <b>1243</b> | HB_CGOAL1     | Cancel Goal Home               |
| <b>1244</b> | HB_C7M1       | Cancel 7m Home                 |
| <b>1245</b> | HB_CYC1       | Cancel Yellow card Home        |
| <b>1246</b> | HB_C2M1       | Cancel 2 minutes penalty Home  |
| <b>1247</b> | HB_CP2M1      | Cancel +2 minutes penalty Home |
| <b>1248</b> | HB_CRC1       | Cancel Red card Home           |
| <b>1250</b> | HB_PR1        | Penalty running Home           |
| <b>1251</b> | HB_PRO1       | Penalty running over Home      |
| <b>1254</b> | HB_TO1        | Throw-off Home                 |
| <b>1257</b> | HB_GK_OFF1    | Goalkeeper left goal Home      |
| <b>1258</b> | HB_GK_ON1     | Goalkeeper back in goal Home   |
| <b>1260</b> | HB_CONF_GOAL1 | Goal confirmation Home         |
| <b>1261</b> | HB_NEXT_PEN1  | 7m Shootout Home Team's turn   |
| <b>2240</b> | HB_POSS2      | Possession Away                |
| <b>2244</b> | HB_GOAL2      | Goal Away                      |
| <b>2245</b> | HB_7M2        | 7 meter Away                   |
| <b>2246</b> | HB_R7M2       | Retake 7 meter Away            |
| <b>2247</b> | HB_7MM2       | 7 meter missed Away            |
| <b>2248</b> | HB_YC2        | Yellow card Away               |
| <b>2249</b> | HB_2M2        | 2 minutes penalty Away         |

| ID          | Event Name    | Long Description               |
|-------------|---------------|--------------------------------|
| <b>2250</b> | HB_P2M2       | +2 minutes penalty Away        |
| <b>2251</b> | HB_RC2        | Red card Away                  |
| <b>2253</b> | HB_2MPO2      | 2 minutes penalty over Away    |
| <b>2254</b> | HB_SH2        | Shot Away                      |
| <b>2259</b> | HB_GKT2       | Goalkeeper-throw Away          |
| <b>2260</b> | HB_TI2        | Throw in Away                  |
| <b>2261</b> | HB_FT2        | Free throw Away                |
| <b>2265</b> | HB_TTO2       | Team timeout Away              |
| <b>2267</b> | HB_CGOAL2     | Cancel Goal Away               |
| <b>2268</b> | HB_C7M2       | Cancel 7m Away                 |
| <b>2269</b> | HB_CYC2       | Cancel Yellow card Away        |
| <b>2270</b> | HB_C2M2       | Cancel 2 minutes penalty Away  |
| <b>2271</b> | HB_CP2M2      | Cancel +2 minutes penalty Away |
| <b>2272</b> | HB_CRC2       | Cancel Red card Away           |
| <b>2274</b> | HB_PR2        | Penalty running Away           |
| <b>2275</b> | HB_PRO2       | Penalty running over Away      |
| <b>2280</b> | HB_TO2        | Throw-off Away                 |
| <b>2281</b> | HB_GK_OFF2    | Goalkeeper left goal Away      |
| <b>2282</b> | HB_GK_ON2     | Goalkeeper back in goal Away   |
| <b>2284</b> | HB_CONF_GOAL2 | Goal confirmation Away         |
| <b>2285</b> | HB_NEXT_PEN2  | 7m Shootout Away Team's turn   |

**Table 47 – Handball Event Code ID Mappings**

#### 8.1.8 Cricket Events

| ID        | Event Name     | Long Description  |
|-----------|----------------|-------------------|
| <b>95</b> | START_INNING   | Start Inning      |
| <b>96</b> | START_INNING_1 | Start Inning Home |
| <b>97</b> | START_INNING_2 | Start Inning Away |
| <b>98</b> | HALF INNING    | Half Inning       |
| <b>99</b> | STOP_INNING    | Stop Inning       |

| ID          | Event Name            | Long Description                      |
|-------------|-----------------------|---------------------------------------|
| <b>105</b>  | START_INNING_SO       | Start Inning Super Over               |
| <b>106</b>  | START_INNING_SO_1     | Start Inning Super Over Home          |
| <b>107</b>  | START_INNING_SO_2     | Start Inning Super Over Away          |
| <b>129</b>  | DANGER                | Danger                                |
| <b>220</b>  | CLOSE_MARKET          | Close Market                          |
| <b>221</b>  | OPEN_MARKET           | Open Market                           |
| <b>222</b>  | POWERPLAY             | Powerplay                             |
| <b>223</b>  | NO_POWERPLAY          | No Powerplay                          |
| <b>224</b>  | BALL_IN_PROGRESS      | Ball in progress                      |
| <b>225</b>  | BALL_COMPLETE         | Ball complete                         |
| <b>286</b>  | GGCC                  | Generic Game Conditions Changed Event |
| <b>288</b>  | CR_OVERS_UPDATE       | Number of overs revised               |
| <b>1920</b> | CR_START_BATTING_1    | Start Batting Home                    |
| <b>1921</b> | CR_STOP_BATTING_1     | Stop Batting Home                     |
| <b>1922</b> | CR_BALL_DATA_1        | Ball Data Home                        |
| <b>1923</b> | CR_BALL_DATA_UPDATE_1 | Ball Data Updated Home                |
| <b>1924</b> | CR_1_RUN1             | 1 Run Home                            |
| <b>1925</b> | CR_2_RUN1             | 2 Runs Home                           |
| <b>1926</b> | CR_3_RUN1             | 3 Runs Home                           |
| <b>1927</b> | CR_4_RUN1             | 4 Runs Home                           |
| <b>1928</b> | CR_5_RUN1             | 5 Runs Home                           |
| <b>1929</b> | CR_6_RUN1             | 6 Runs Home                           |
| <b>1930</b> | CR_CANCEL_1_RUN1      | Cancel 1 Run Home                     |
| <b>1931</b> | CR_CANCEL_2_RUNS1     | Cancel 2 Runs Home                    |
| <b>1932</b> | CR_CANCEL_3_RUNS1     | Cancel 3 Runs Home                    |
| <b>1933</b> | CR_CANCEL_4_RUNS1     | Cancel 4 Runs Home                    |
| <b>1934</b> | CR_CANCEL_5_RUNS1     | Cancel 5 Runs Home                    |
| <b>1935</b> | CR_CANCEL_6_RUNS1     | Cancel 6 Runs Home                    |
| <b>1936</b> | CR_WICKET1            | Wicket Home                           |
| <b>1937</b> | CR_NO_BALL1           | No Ball Home                          |

| ID          | Event Name            | Long Description       |
|-------------|-----------------------|------------------------|
| <b>1938</b> | CR_WIDE1              | Wide Home              |
| <b>1939</b> | CR_BOUNDARY1          | Boundary Home          |
| <b>1940</b> | CR_OUT1               | Dismissal Home         |
| <b>1941</b> | CR_P_WICKET1          | Possible Wicket Home   |
| <b>1942</b> | CR_N_WICKET1          | No Wicket Home         |
| <b>1943</b> | CR_P_BOUNDARY1        | Possible Boundary Home |
| <b>1944</b> | CR_N_BOUNDARY1        | No Boundary Home       |
| <b>1945</b> | CR_NEXT_BOWLER1       | Next Bowler Home       |
| <b>1946</b> | CR_BATSMAN_INJ1       | Batsman Injury Home    |
| <b>1947</b> | CR_BOWLER_INJ1        | Bowler Injury Home     |
| <b>1948</b> | CR_OVER1              | Over Home              |
| <b>1949</b> | CR_CANCEL_WICKET1     | Cancel Wicket Home     |
| <b>1950</b> | CR_CANCEL_NO_BALL1    | Cancel No Ball Home    |
| <b>1951</b> | CR_CANCEL_WIDE1       | Cancel Wide Home       |
| <b>1952</b> | CR_CANCEL_BOUNDARY1   | Cancel Boundary Home   |
| <b>1953</b> | CR_CANCEL_OVER1       | Cancel Over Home       |
| <b>1954</b> | CR_DOT_BALL1          | Dot Ball Home          |
| <b>1955</b> | CR_CANCEL_DOT_BALL1   | Cancel Dot Ball Home   |
| <b>1956</b> | CR_PENALTY1           | Penalty Home           |
| <b>1957</b> | CR_CPENALTY1          | Cancel Penalty Home    |
| <b>1958</b> | CR_COUT1              | Cancel Dismissal Home  |
| <b>1960</b> | CR_POSSIBLE_RUNS1     | Possible Run(s) Home   |
| <b>2944</b> | CR_START_BATTING2     | Start Batting Away     |
| <b>2945</b> | CR_STOP_BATTING2      | Start Batting Away     |
| <b>2946</b> | CR_BALL_DATA2         | Ball Data Away         |
| <b>2947</b> | CR_BALL_DATA_UPDATE_2 | Ball Data Updated Away |
| <b>2948</b> | CR_1_RUN2             | 1 Run Away             |
| <b>2949</b> | CR_2_RUN2             | 2 Runs Away            |
| <b>2950</b> | CR_3_RUN2             | 3 Runs Away            |
| <b>2951</b> | CR_4_RUN2             | 4 Runs Away            |



| ID          | Event Name          | Long Description       |
|-------------|---------------------|------------------------|
| <b>2952</b> | CR_5_RUN2           | 5 Runs Away            |
| <b>2953</b> | CR_6_RUN2           | 6 Runs Away            |
| <b>2954</b> | CR_CANCEL_1_RUN2    | Cancel 1 Run Away      |
| <b>2955</b> | CR_CANCEL_2_RUNS2   | Cancel 2 Runs Away     |
| <b>2956</b> | CR_CANCEL_3_RUNS2   | Cancel 3 Runs Away     |
| <b>2957</b> | CR_CANCEL_4_RUNS2   | Cancel 4 Runs Away     |
| <b>2958</b> | CR_CANCEL_5_RUNS2   | Cancel 5 Runs Away     |
| <b>2959</b> | CR_CANCEL_6_RUNS2   | Cancel 6 Runs Away     |
| <b>2960</b> | CR_WICKET2          | Wicket Away            |
| <b>2961</b> | CR_NO_BALL2         | No Ball Away           |
| <b>2962</b> | CR_WIDE2            | Wide Away              |
| <b>2963</b> | CR_BOUNDARY2        | Boundary Away          |
| <b>2964</b> | CR_OUT2             | Dismissal Away         |
| <b>2965</b> | CR_P_WICKET2        | Possible Wicket Away   |
| <b>2966</b> | CR_N_WICKET2        | No Wicket Away         |
| <b>2967</b> | CR_P_BOUNDARY2      | Possible Boundary Away |
| <b>2968</b> | CR_N_BOUNDARY2      | No Boundary Away       |
| <b>2969</b> | CR_NEXT_BOWLER2     | Next Bowler Away       |
| <b>2970</b> | CR_BATSMAN_INJ2     | Batsman Injury Away    |
| <b>2971</b> | CR_BOWLER_INJ2      | Bowler Injury Away     |
| <b>2972</b> | CR_OVER2            | Over Away              |
| <b>2973</b> | CR_CANCEL_WICKET2   | Cancel Wicket Away     |
| <b>2974</b> | CR_CANCEL_NO_BALL2  | Cancel No Ball Away    |
| <b>2975</b> | CR_CANCEL_WIDE2     | Cancel Wide Away       |
| <b>2976</b> | CR_CANCEL_BOUNDARY2 | Cancel Boundary Away   |
| <b>2977</b> | CR_CANCEL_OVER2     | Cancel Over Away       |
| <b>2978</b> | CR_DOT_BALL2        | Dot Ball Away          |
| <b>2979</b> | CR_CANCEL_DOT_BALL2 | Cancel Dot Ball Away   |
| <b>2980</b> | CR_PENALTY2         | Penalty Away           |
| <b>2981</b> | CR_CPENALTY2        | Cancel Penalty Away    |

| ID          | Event Name        | Long Description      |
|-------------|-------------------|-----------------------|
| <b>2982</b> | CR_COUT2          | Cancel Dismissal Away |
| <b>2984</b> | CR_POSSIBLE_RUNS2 | Possible Run(s) Away  |

**Table 48 – Cricket Event Code ID Mappings**

#### 8.1.9 Baseball Events

| ID          | Event Name           | Long Description                         |
|-------------|----------------------|--|
| <b>95</b>   | START_INNING         | Start Inning                             |
| <b>96</b>   | START_INNING_1       | Start Inning Home                        |
| <b>97</b>   | START_INNING_2       | Start Inning Away                        |
| <b>98</b>   | HALF_INNING          | Half Inning                              |
| <b>99</b>   | STOP_INNING          | Stop Inning                              |
| <b>129</b>  | DANGER               | Danger                                   |
| <b>141</b>  | GAME_ABOUT_TO_START  | Game About to Start                      |
| <b>220</b>  | CLOSE_MARKET         | Close Market                             |
| <b>221</b>  | OPEN_MARKET          | Open Market                              |
| <b>232</b>  | RUNNER_ON_BASE       | Runner on Base                           |
| <b>233</b>  | PITCHER_READY        | Pitcher Ready                            |
| <b>234</b>  | PLAY_FINISHED        | Play Finished                            |
| <b>521</b>  | Scout connected      | Scout connected                          |
| <b>533</b>  | VAR started          | Video assistant referee session started  |
| <b>536</b>  | VAR finished         | Video assistant referee session finished |
| <b>1856</b> | BSB_NEXT_BATTER1     | Next Batter Home                         |
| <b>1857</b> | BSB_SUB1             | Substitution Home                        |
| <b>1858</b> | BSB_PITCHER_CHANGED1 | Pitcher changed Home                     |
| <b>1860</b> | BSB_RUN1             | Run Home                                 |
| <b>1861</b> | BSB_CRUN1            | Cancel Run Home                          |
| <b>1862</b> | BSB_HOMERUN1         | Homerun Home                             |
| <b>1863</b> | BSB_OUT1             | Out Home                                 |
| <b>1864</b> | BSB_COUT1            | Cancel Out Home                          |
| <b>1865</b> | BSB_STRIKE1          | Strike Home                              |

| ID          | Event Name               | Long Description           |
|-------------|--------------------------|----------------------------|
| <b>1866</b> | BSB_STRIKE_OUT1          | Strike Out Home            |
| <b>1867</b> | BSB_FLY_OUT1             | Fly Out Home               |
| <b>1868</b> | BSB_HIT1                 | Hit Home                   |
| <b>1869</b> | BSB_BALL1                | Ball Home                  |
| <b>1870</b> | BSB_WALK1                | Walk Home                  |
| <b>1871</b> | BSB_STEAL1               | Steal Home                 |
| <b>1872</b> | BSB_FOUL1                | Foul Home                  |
| <b>1873</b> | BSB_ERROR1               | Error Home                 |
| <b>1874</b> | BSB_FIELDERS_CHOICE1     | Fielders Choice Home       |
| <b>1875</b> | BSB_UNCAUGHT_3RD_STRIKE1 | Uncaught third Strike Home |
| <b>1876</b> | BSB_CPLAY1               | Cancel Play Home           |
| <b>1877</b> | BSB_TIMEOUT1             | Timeout Home               |
| <b>1878</b> | BSB_PICKED_OFF1          | Picker Off Home            |
| <b>1879</b> | BSB_CAUGHT_STEALING1     | Caught Stealing Home       |
| <b>1880</b> | BSB_PITCH1               | Pitch Home                 |
| <b>1881</b> | BSB_START_BATTING1       | Start Batting Home         |
| <b>1882</b> | BSB_SINGLE1              | Single Home                |
| <b>1883</b> | BSB_DOUBLE1              | Double Home                |
| <b>1884</b> | BSB_TRIPLE1              | Triple Home                |
| <b>1885</b> | BSB_INTENTIONAL_WALK1    | Intentional Walk Home      |
| <b>1886</b> | BSB_HIT_BY_PITCH1        | Hit by Pitch Home          |
| <b>1887</b> | BSB_UNKNOWN_PITCH1       | Unknown Pitch Home         |
| <b>1888</b> | BSB_EJECTION1            | Ejection Home              |
| <b>1889</b> | BSB_CHALLENGE1           | Challenge Home             |
| <b>1890</b> | BSB_STOP_BATTING1        | Stop Batting Home          |
| <b>1891</b> | BSB_CHIT1                | Cancel Hit Home            |
| <b>1892</b> | BSB_CERROR1              | Cancel Error Home          |
| <b>1893</b> | BSB_FORCE_OUT1           | Force Out Home             |
| <b>1894</b> | BSB_TAG_OUT1             | Tag Out Home               |
| <b>1895</b> | BSB_DOUBLE_PLAY1         | Double Play Home           |

| ID          | Event Name               | Long Description           |
|-------------|--------------------------|----------------------------|
| <b>1896</b> | BSB_TRIPLE_PLAY1         | Triple Play Home           |
| <b>2880</b> | BSB_NEXT_BATTER2         | Next Batter Away           |
| <b>2881</b> | BSB_SUB2                 | Substitution Away          |
| <b>2882</b> | BSB_PITCHER_CHANGED2     | Pitcher changed Away       |
| <b>2884</b> | BSB_RUN2                 | Run Away                   |
| <b>2885</b> | BSB_CRUN2                | Cancel Run Away            |
| <b>2886</b> | BSB_HOMERUN2             | Homerun Away               |
| <b>2887</b> | BSB_OUT2                 | Out Away                   |
| <b>2888</b> | BSB_COUT2                | Cancel Out Away            |
| <b>2889</b> | BSB_STRIKE2              | Strike Away                |
| <b>2890</b> | BSB_STRIKE_OUT2          | Strike Out Away            |
| <b>2891</b> | BSB_FLY_OUT2             | Fly Out Away               |
| <b>2892</b> | BSB_HIT2                 | Hit Away                   |
| <b>2893</b> | BSB_BALL2                | Ball Away                  |
| <b>2894</b> | BSB_WALK2                | Walk Away                  |
| <b>2895</b> | BSB_STEAL2               | Steal Away                 |
| <b>2896</b> | BSB_FOUL2                | Foul Away                  |
| <b>2897</b> | BSB_ERROR2               | Error Away                 |
| <b>2898</b> | BSB_FIELDERS_CHOICE2     | Fielders Choice Away       |
| <b>2899</b> | BSB_UNCAUGHT_3RD_STRIKE2 | Uncaught third Strike Away |
| <b>2900</b> | BSB_CPLAY2               | Cancel Play Away           |
| <b>2901</b> | BSB_TIMEOUT2             | Timeout Away               |
| <b>2902</b> | BSB_PICKED_OFF2          | Picker Off Away            |
| <b>2903</b> | BSB_CAUGHT_STEALING2     | Caught Stealing Away       |
| <b>2904</b> | BSB_PITCH2               | Pitch Away                 |
| <b>2905</b> | BSB_START_BATTING2       | Start Batting Away         |
| <b>2906</b> | BSB_SINGLE2              | Single Away                |
| <b>2907</b> | BSB_DOUBLE2              | Double Away                |
| <b>2908</b> | BSB_TRIPLE2              | Triple Away                |
| <b>2909</b> | BSB_INTENTIONAL_WALK2    | Intentional Walk Away      |

| ID          | Event Name         | Long Description   |
|-------------|--------------------|--------------------|
| <b>2910</b> | BSB_HIT_BY_PITCH2  | Hit by Pitch Away  |
| <b>2911</b> | BSB_UNKNOWN_PITCH2 | Unknown Pitch Away |
| <b>2912</b> | BSB_EJECTION2      | Ejection Away      |
| <b>2913</b> | BSB_CHALLENGE2     | Challenge Away     |
| <b>2914</b> | BSB_STOP_BATTING2  | Stop Batting Away  |
| <b>2915</b> | BSB_CHIT2          | Cancel Hit Away    |
| <b>2916</b> | BSB_CERROR2        | Cancel Error Away  |
| <b>2917</b> | BSB_FORCE_OUT2     | Force Out Away     |
| <b>2918</b> | BSB_TAG_OUT2       | Tag Out Away       |
| <b>2919</b> | BSB_DOUBLE_PLAY2   | Double Play Away   |
| <b>2920</b> | BSB_TRIPLE_PLAY2   | Triple Play Away   |

**Table 49 – Baseball Event Code ID Mappings**

## 8.2 Event Reason Mapping

The following tables provide an overview of the event reason mapping information.

### 8.2.1 Soccer

| ID        | Short Description       | Goal | Red Card | Yellow/Red Card | Yellow Card |
|-----------|-------------------------|------|----------|-----------------|-------------|
| <b>0</b>  | shot                    | X    |          |                 |             |
| <b>1</b>  | free kick               | X    |          |                 |             |
| <b>2</b>  | header                  | X    |          |                 |             |
| <b>3</b>  | own goal                | X    |          |                 |             |
| <b>4</b>  | penalty                 | X    |          |                 |             |
| <b>5</b>  | penalty shootout        | X    |          |                 |             |
| <b>10</b> | foul                    |      | X        | X               | X           |
| <b>11</b> | handball                |      | X        | X               | X           |
| <b>12</b> | criticism               |      | X        | X               | X           |
| <b>13</b> | unsportsmanlike conduct |      | X        | X               | X           |
| <b>14</b> | assault                 |      | X        | X               | X           |
| <b>15</b> | dive                    |      | X        | X               | X           |

| ID        | Short Description            | Goal | Red Card | Yellow/Red Card | Yellow Card |
|-----------|------------------------------|------|----------|-----------------|-------------|
| <b>16</b> | player on substitution bench |      | X        | X               | X           |
| <b>17</b> | trainer                      |      | X        | X               | X           |
| <b>99</b> | other                        | X    | X        | X               | X           |

**Table 50 – Soccer Event Reason ID Mappings**

### 8.2.2 Basketball

| ID        | Short Description | Fouled Out | Disqualified player | Player injured (out) | Player back in game |
|-----------|-------------------|------------|---------------------|----------------------|---------------------|
| <b>10</b> | foul              | X          | X                   |                      |                     |
| <b>18</b> | violence          | X          | X                   |                      |                     |
| <b>19</b> | insult            | X          | X                   |                      |                     |
| <b>20</b> | injury            |            |                     | X                    |                     |
| <b>21</b> | on bench          |            |                     |                      | X                   |
| <b>22</b> | on court          |            |                     |                      | X                   |

**Table 51 – Basketball Event Reason ID Mappings**

### 8.2.3 Ice Hockey

| ID        | Short Description     | Goal | Penalties |
|-----------|-----------------------|------|-----------|
| <b>0</b>  | shot                  | X    |           |
| <b>4</b>  | penalty               | X    |           |
| <b>25</b> | powerplay             | X    |           |
| <b>26</b> | shorthanded           | X    |           |
| <b>27</b> | empty net             | X    |           |
| <b>29</b> | empty net/powerplay   | X    |           |
| <b>30</b> | empty net/shorthanded | X    |           |
| <b>31</b> | technical goal        | X    |           |
| <b>10</b> | foul                  |      | X         |
| <b>28</b> | roughing              |      | X         |
| <b>99</b> | other                 |      | X         |

**Table 52 – Ice Hockey Event Reason ID Mappings**

#### 8.2.4 Volleyball

| ID        | Short Description | Penalty | Expulsion | Disqualification |
|-----------|-------------------|---------|-----------|------------------|
| <b>32</b> | player            | X       | X         | X                |
| <b>33</b> | other team member | X       | X         | X                |
| <b>34</b> | delay             | X       |           |                  |

**Table 53 – Volleyball Event Reason ID Mappings**

#### 8.2.5 Beach Volleyball

| ID        | Short Description | Penalty | Expulsion | Disqualification |
|-----------|-------------------|---------|-----------|------------------|
| <b>32</b> | player            | X       | X         | X                |
| <b>33</b> | other team member | X       | X         | X                |
| <b>34</b> | delay             | X       |           |                  |

**Table 54 – Beach Volleyball Event Reason ID Mappings**

#### 8.2.6 Handball

| ID        | Short Description       | Goal | 7-Metre | Yellow Card | Red Card | 2min Suspension | +2min Suspension |
|-----------|-------------------------|------|---------|-------------|----------|-----------------|------------------|
| <b>0</b>  | shot                    | X    |         |             |          |                 |                  |
| <b>6</b>  | 7 meter                 | X    | X       |             |          |                 |                  |
| <b>7</b>  | 7 meter shootout        | X    |         | X           | X        | X               | X                |
| <b>10</b> | foul                    |      |         | X           | X        | X               | X                |
| <b>13</b> | unsportsmanlike conduct |      |         |             | X        |                 |                  |
| <b>35</b> | third suspension        |      |         |             |          | X               | X                |
| <b>36</b> | faulty substitution     |      |         |             |          | X               | X                |
| <b>37</b> | disqualification        |      |         |             |          |                 |                  |
| <b>99</b> | other                   | X    |         |             |          |                 |                  |

**Table 55 – Handball Event Reason ID Mappings**

#### 8.2.7 Cricket

Event reasons are not supported for cricket feeds. Such information is not provided for cricket games.

### 8.2.8 Baseball

| ID | Short Description   | Run | Out | Foul | Pitcher changed | Next Batter |
|----|---------------------|-----|-----|------|-----------------|-------------|
| -1 | Undefined           | X   | X   | X    | X               | X           |
| 39 | Batter              |     |     |      | X               |             |
| 40 | Pitcher             |     |     |      | X               |             |
| 41 | Interference        |     | X   |      |                 |             |
| 42 | Out of base path    |     | X   |      |                 |             |
| 43 | Hit by batted ball  |     | X   |      |                 |             |
| 44 | Pick off            |     | X   |      |                 |             |
| 45 | Force out           |     | X   |      |                 |             |
| 46 | Double off          |     | X   |      |                 |             |
| 47 | Out on appeal       |     | X   |      |                 |             |
| 48 | Tag out             |     | X   |      |                 |             |
| 49 | Caught stealing     |     | X   |      |                 |             |
| 50 | Fly out             |     | X   |      |                 |             |
| 51 | Line out            |     | X   |      |                 |             |
| 52 | Out of batter's box |     | X   |      |                 |             |
| 53 | Pop out             |     | X   |      |                 |             |
| 54 | Sacrifice fly       |     | X   |      |                 |             |
| 55 | Strike out          |     | X   |      |                 |             |
| 56 | Ground out          |     | X   |      |                 |             |
| 57 | Sacrifice bunt      |     | X   |      |                 |             |
| 58 | Single out          |     | X   |      |                 |             |
| 59 | Double out          |     | X   |      |                 |             |
| 60 | Triple out          |     | X   |      |                 |             |
| 61 | Fielder choice out  |     | X   |      |                 |             |
| 62 | On error out        |     | X   |      |                 |             |
| 63 | Foul tip            |     |     | X    |                 |             |
| 64 | Foul ball           |     |     | X    |                 |             |



| ID        | Short Description | Run | Out | Foul | Pitcher changed | Next Batter |
|-----------|-------------------|-----|-----|------|-----------------|-------------|
| <b>99</b> | Other             | X   | X   | X    | X               | X           |

**Table 56 – Baseball Event Reason ID Mappings**

### 8.3 Ticker State Handling

The following tables provide an overview of the ticker state mapping information.

#### 8.3.1 Soccer

| ID          | Short Description | Long Description        |
|-------------|-------------------|-------------------------|
| <b>1</b>    | Not Started       | Not started             |
| <b>2</b>    | RT First Half     | First half              |
| <b>4</b>    | RT Pause          | Half time               |
| <b>8</b>    | RT Second Half    | Second half             |
| <b>16</b>   | Finished          | Finished                |
| <b>32</b>   | Finish RT         | Regular time finished   |
| <b>64</b>   | Ot First Half     | First half extra time   |
| <b>128</b>  | Ot Pause          | Half time of extra time |
| <b>256</b>  | Ot Second Half    | Second half extra time  |
| <b>512</b>  | Finish Ot         | Extra time finished     |
| <b>1024</b> | Penalty Shootout  | Penalty shootout        |

**Table 57 – Soccer State ID Mappings**

#### 8.3.2 Basketball

| ID        | Short Description | Long Description  |
|-----------|-------------------|---|
| <b>1</b>  | Not Started       | Not Started   |
| <b>2</b>  | RT First Half     | RT First Half (only applies if NCAA rules are used; see also chapter 8.15.2 <i>Basketball</i> ).  |
| <b>4</b>  | RT Pause          | RT Pause (Break between half 1/2 or quarter 2/3).   |
| <b>8</b>  | RT Second Half    | RT Second Half (only applies if NCAA rules are used; see also chapter 8.15.2 <i>Basketball</i> ). |
| <b>16</b> | Finished          | Finished  |
| <b>32</b> | Finish RT         | Finish RT (after 4th quarter or 2nd half if and overtime is following).                           |

| ID          | Short Description       | Long Description                    |
|-------------|-------------------------|-------------------------------------|
| <b>2000</b> | Quarter break           | Break between quarters 1/2 and 3/4. |
| <b>2001</b> | 1 <sup>st</sup> Quarter |                                     |
| <b>2002</b> | 2 <sup>nd</sup> Quarter |                                     |
| <b>2003</b> | 3 <sup>rd</sup> Quarter |                                     |
| <b>2004</b> | 4 <sup>th</sup> Quarter |                                     |
| <b>2005</b> | Overtime                |                                     |
| <b>2006</b> | Overtime break          | Break during overtimes.             |

**Table 58 – Basketball State ID Mappings**

### 8.3.3 Ice Hockey

| ID          | Short Description      |
|-------------|------------------------|
| <b>1</b>    | Not Started            |
| <b>16</b>   | Finished               |
| <b>32</b>   | Finish RT              |
| <b>512</b>  | Finish Ot              |
| <b>2300</b> | Period Break           |
| <b>2301</b> | 1 <sup>st</sup> Period |
| <b>2302</b> | 2 <sup>nd</sup> Period |
| <b>2303</b> | 3 <sup>rd</sup> Period |
| <b>2005</b> | Overtime               |
| <b>2006</b> | Overtime Break         |

**Table 59 – Ice Hockey State ID Mappings**

### 8.3.4 Volleyball

| ID          | Short Description   |
|-------------|---------------------|
| <b>1</b>    | Not Started         |
| <b>16</b>   | Finished            |
| <b>2100</b> | Set break           |
| <b>2101</b> | 1 <sup>st</sup> Set |

| ID          | Short Description   |
|-------------|---------------------|
| <b>2102</b> | 2 <sup>nd</sup> Set |
| <b>2103</b> | 3 <sup>rd</sup> Set |
| <b>2104</b> | 4 <sup>th</sup> Set |
| <b>2105</b> | 5 <sup>th</sup> Set |
| <b>2106</b> | 6 <sup>th</sup> Set |
| <b>2107</b> | 7 <sup>th</sup> Set |
| <b>2150</b> | Golden Set          |

**Table 60 – Volleyball State ID Mappings**

### 8.3.5 Beach Volleyball

| ID          | Short Description   |
|-------------|---------------------|
| <b>1</b>    | Not Started         |
| <b>16</b>   | Finished            |
| <b>2100</b> | Set break           |
| <b>2101</b> | 1 <sup>st</sup> Set |
| <b>2102</b> | 2 <sup>nd</sup> Set |
| <b>2103</b> | 3 <sup>rd</sup> Set |
| <b>2104</b> | 4 <sup>th</sup> Set |
| <b>2105</b> | 5 <sup>th</sup> Set |
| <b>2106</b> | 6 <sup>th</sup> Set |
| <b>2107</b> | 7 <sup>th</sup> Set |
| <b>2150</b> | Golden Set          |

**Table 61 – Beach Volleyball State ID Mappings**

### 8.3.6 Handball

| ID       | Short Description | Long Description |
|----------|-------------------|------------------|
| <b>1</b> | Not Started       | Not started      |
| <b>2</b> | Rt First Half     | First half       |
| <b>4</b> | Rt Pause          | Half time        |
| <b>8</b> | Rt Second Half    | Second half      |

| ID          | Short Description           | Long Description        |
|-------------|-----------------------------|-------------------------|
| <b>16</b>   | Finished                    | Finished                |
| <b>32</b>   | Finish Rt                   | Regular time finished   |
| <b>64</b>   | Ot First Half               | First half extra time   |
| <b>128</b>  | Ot Pause                    | Half time of extra time |
| <b>256</b>  | Ot Second Half              | Second half extra time  |
| <b>512</b>  | Finish Ot                   | Extra time finished     |
| <b>2200</b> | 7m shootout                 |                         |
| <b>2220</b> | First overtime finished     |                         |
| <b>2230</b> | Second overtime finished    |                         |
| <b>2231</b> | Second overtime pause       |                         |
| <b>2232</b> | Second overtime second half |                         |

**Table 62 – Handball State ID Mappings**

### 8.3.7 Cricket

| ID          | Short Description |
|-------------|-------------------|
| <b>1</b>    | Not Started       |
| <b>16</b>   | Finished          |
| <b>2600</b> | Inning break      |
| <b>2601</b> | Inning 1          |
| <b>2602</b> | Inning 2          |
| <b>2680</b> | Inning Super Over |

**Table 63 – Cricket State ID Mappings**

### 8.3.8 Baseball

| ID          | Short Description |
|-------------|-------------------|
| <b>1</b>    | Not Started       |
| <b>16</b>   | Finished          |
| <b>2600</b> | Inning break      |
| <b>2601</b> | Inning 1          |
| <b>2602</b> | Inning 2          |

| ID          | Short Description |
|-------------|-------------------|
| <b>2603</b> | Inning 3          |
| <b>2604</b> | Inning 4          |
| <b>2605</b> | Inning 5          |
| <b>2606</b> | Inning 6          |
| <b>2607</b> | Inning 7          |
| <b>2608</b> | Inning 8          |
| <b>2609</b> | Inning 9          |
| <b>2610</b> | Inning 10         |
| <b>2611</b> | Inning 11         |
| <b>2612</b> | Inning 12         |
| <b>2613</b> | Inning 13         |
| <b>2614</b> | Inning 14         |
| <b>2615</b> | Inning 15         |
| <b>2616</b> | Inning 16         |
| <b>2617</b> | Inning 17         |
| <b>2618</b> | Inning 18         |
| <b>2619</b> | Inning 19         |
| <b>2620</b> | Inning 20         |
| <b>2621</b> | Inning 21         |
| <b>2622</b> | Inning 22         |
| <b>2623</b> | Inning 23         |
| <b>2624</b> | Inning 24         |
| <b>2625</b> | Inning 25         |
| <b>2626</b> | Inning 26         |
| <b>2627</b> | Inning 27         |
| <b>2628</b> | Inning 28         |
| <b>2629</b> | Inning 29         |
| <b>2630</b> | Inning 30         |
| <b>2631</b> | Inning 31         |
| <b>2632</b> | Inning 32         |

| ID          | Short Description |
|-------------|-------------------|
| <b>2633</b> | Inning 33         |
| <b>2634</b> | Inning 34         |
| <b>2635</b> | Inning 35         |
| <b>2636</b> | Inning 36         |
| <b>2637</b> | Inning 37         |
| <b>2638</b> | Inning 38         |
| <b>2639</b> | Inning 39         |
| <b>2640</b> | Inning 40         |

**Table 64 – Baseball State ID Mappings**

## 8.4 Game Status Mapping

The following table provides an overview of the Game Status mapping information. Game Status values apply to all sports.

| ID       | Description | Additional Information              |
|----------|-------------|-------------------------------------|
| <b>0</b> | Open        | The coverage has not started yet.   |
| <b>1</b> | Finished    | The coverage ended.                 |
| <b>2</b> | Cancelled   | The coverage was cancelled.         |
| <b>3</b> | Running     | The game is currently covered live. |
| <b>4</b> | Suspended   | The game is officially cancelled.   |

**Table 65 – State ID Mappings**

## 8.5 Home Advantage Mapping

The following table provides an overview of the Home Advantage Mapping information. Home Advantage Values apply to all sports.

| ID       | Description      |
|----------|------------------|
| <b>0</b> | Undefined        |
| <b>1</b> | Competitor 1     |
| <b>2</b> | Competitor 2     |
| <b>3</b> | Both competitors |
| <b>4</b> | No competitor    |

**Table 66 – Home Advantage Mappings**

## 8.6 Game Condition Mapping

The following tables provide an overview of the game condition mapping info.

### 8.6.1 Pitch Conditions

Please note that pitch conditions are available for soccer and cricket only. For all other sports the pitch conditions are set to *-1*.

| ID        | Description         |
|-----------|---------------------|
| <b>-1</b> | Undefined           |
| <b>0</b>  | Good                |
| <b>1</b>  | Wet                 |
| <b>2</b>  | Snow                |
| <b>3</b>  | Excellent           |
| <b>4</b>  | Regular             |
| <b>5</b>  | Wet and Fast        |
| <b>6</b>  | Slow due to water   |
| <b>7</b>  | Uneven & cutting up |
| <b>8</b>  | Goalmouths affected |
| <b>9</b>  | Hard or Frozen      |
| <b>10</b> | Artificial pitch    |

Table 67 – Pitch Condition Mappings

### 8.6.2 Weather Conditions

Please note that weather conditions are available only for soccer, cricket and beach volleyball. For all other sports the weather conditions are set to *-1*.

| ID        | Description            | SO | BVB |
|-----------|------------------------|----|-----|
| <b>-1</b> | Undefined (all sports) |    |     |
| <b>0</b>  | Good                   | X  | X   |
| <b>1</b>  | Windy                  | X  | X   |
| <b>2</b>  | Stormy                 | X  |     |
| <b>3</b>  | Rain                   | X  | X   |
| <b>4</b>  | Snowfall               | X  |     |

| ID | Description    | SO | BVB |
|----|----------------|----|-----|
| 5  | Very hot       |    |     |
| 6  | Heavy rain     | X  |     |
| 7  | Light rain     |    |     |
| 8  | Cloudy         |    |     |
| 9  | Heavy snowfall | X  |     |
| 10 | Light snowfall |    |     |
| 11 | Sleet/Hail     | X  |     |
| 12 | Strong wind    | X  | X   |
| 13 | Light wind     |    |     |
| 14 | Sun            |    |     |
| 15 | Hot            | X  | X   |
| 16 | Mild           |    |     |
| 17 | Cold           | X  | X   |
| 18 | Fog            | X  |     |
| 19 | Thunderstorm   | X  |     |
| 20 | Indoor venue   | X  | X   |

Table 68 – Weather Condition Mappings

### 8.6.3 Attendance

| ID | Description  |
|----|--------------|
| -1 | Undefined    |
| 0  | Small        |
| 1  | Medium       |
| 2  | Full         |
| 3  | Without fans |

Table 69 – Attendance Mappings

### 8.6.4 Movement

*Movement* is exclusively featured in cricket.



| ID        | Description |
|-----------|-------------|
| <b>-1</b> | Undefined   |
| <b>0</b>  | Base        |
| <b>1</b>  | Low         |
| <b>2</b>  | Average     |
| <b>3</b>  | High        |

**Table 70 – Movement Mappings**

#### 8.6.5 Bounce

*Bounce* is exclusively featured in cricket.

| ID        | Description  |
|-----------|--------------|
| <b>-1</b> | Undefined    |
| <b>0</b>  | Consistent   |
| <b>1</b>  | Average      |
| <b>2</b>  | Varying      |
| <b>3</b>  | Inconsistent |

**Table 71 – Bounce Mappings**

#### 8.6.6 Light

*Light* is exclusively featured in cricket.

| ID        | Description |
|-----------|-------------|
| <b>-1</b> | Undefined   |
| <b>0</b>  | Worst       |
| <b>1</b>  | Bad         |
| <b>2</b>  | Poor        |
| <b>3</b>  | Average     |
| <b>4</b>  | Good        |
| <b>5</b>  | Excellent   |

**Table 72 – Light Mappings**

### 8.6.7 MatchDay

*MatchDay* is only supported for Cricket and represents the match day as number (1, 2, 3...) on multi-day matches (i.e. test matches may last up to five days).

## 8.7 Formation Data Mapping

The following table provides an overview of the Formation Data Mapping. Formation data is exclusively available in soccer

| ID | Description |
|----|-------------|
| 0  | Undefined   |
| 1  | 4-4-2       |
| 2  | 4-5-1       |
| 3  | 3-5-2       |
| 4  | 4-3-3       |
| 5  | 3-4-3       |
| 7  | 4-1-2-1-2   |
| 8  | 4-4-1-1     |
| 9  | 4-1-4-1     |
| 10 | 4-2-3-1     |
| 11 | 4-3-2-1     |
| 12 | 5-3-2       |
| 13 | 5-4-1       |
| 14 | 4-2-2-2     |
| 15 | 3-5-1-1     |
| 16 | 3-4-2-1     |
| 17 | 3-4-1-2     |
| 18 | 3-1-4-2     |
| 19 | 4-1-3-2     |
| 20 | 4-2-4-0     |
| 21 | 4-3-1-2     |
| 22 | 3-2-4-1     |
| 23 | 3-3-3-1     |

Table 73 – Formation Data Mappings

## 8.8 Expected Goal Data Mapping

*Expected goal* values are exclusively featured in soccer.

### 8.8.1 Body Part

| ID | Description |
|----|-------------|
| -1 | Undefined   |
| 15 | Head        |
| 20 | Right foot  |
| 21 | Other       |
| 75 | Left foot   |

Table 74 – Body Part

### 8.8.2 Pattern of Play

| ID | Description  |
|----|--------------|
| -1 | Undefined    |
| 9  | Penalty      |
| 22 | Regular play |
| 25 | From corner  |
| 26 | Free kick    |
| 28 | Own goal     |

Table 75 – Pattern of Play

### 8.8.3 Shot Location

| ID | Description       |
|----|-------------------|
| -1 | Undefined         |
| 16 | Small box         |
| 17 | Box-centre        |
| 18 | Out of box-centre |
| 19 | 35+ centre        |
| 60 | Small box-right   |
| 61 | Small box-left    |

| ID        | Description           |
|-----------|-----------------------|
| <b>62</b> | Box-deep right        |
| <b>63</b> | Box-right             |
| <b>64</b> | Box-left              |
| <b>65</b> | Box-deep left         |
| <b>66</b> | Out of box-deep right |
| <b>67</b> | Out of box-right      |
| <b>68</b> | Out of box-left       |
| <b>69</b> | Out of box-deep left  |
| <b>70</b> | 35+ right             |
| <b>71</b> | 35+ left              |

**Table 76 – Shot Location**

#### 8.8.4 Shot Result

| ID        | Description   |
|-----------|---------------|
| <b>-1</b> | Undefined     |
| <b>13</b> | Miss          |
| <b>14</b> | Post          |
| <b>15</b> | Attempt saved |
| <b>16</b> | Goal          |

**Table 77 – Shot Result**

## 8.9 System Message Mapping

The following tables provide an overview of System Messages used in games.

| Term/Abbreviation      | Description  |
|------------------------|--|
| <b>DB</b>              | Database   |
| <b>Game Conditions</b> | Information about the basic circumstances of a game  |
| <b>Game Period</b>     | The different stages of a sports event. (e.g. 1st half, 3rd period, 2nd quarter, half-time break, extra time etc.) |

**Table 78 – General System Messages**

### 8.9.1 Soccer

| ID         | Description   |
|------------|---|
| <b>101</b> | Please hold on, the connection in this area is down.              |
| <b>102</b> | Please hold on, we are rechecking the score.                      |
| <b>103</b> | Please hold on, our coverage might start with a delay.            |
| <b>104</b> | Please hold on, we are trying to solve the problem.               |
| <b>105</b> | Please hold on, we are rechecking the number of red cards.        |
| <b>106</b> | Please hold on, we are rechecking the number of yellow/red cards. |
| <b>107</b> | Please hold on, we are rechecking the number of corners.          |
| <b>108</b> | Please hold on, we are rechecking the number of yellow cards.     |
| <b>120</b> | Please hold on, we are rechecking the number of penalties.        |
| <b>201</b> | The score is correct: (%SCORE%)                                   |
| <b>202</b> | The number of red cards is correct: (%SCORE%)                     |
| <b>203</b> | The number of yellow/red cards is correct: (%SCORE%)              |
| <b>204</b> | The number of corners is correct: (%SCORE%)                       |
| <b>205</b> | The number of yellow cards is correct: (%SCORE%)                  |
| <b>214</b> | The number of penalties is correct: (%SCORE%)                     |
| <b>225</b> | The number of substitutions is correct: (%SCORE%)                 |
| <b>301</b> | The game has been restarted.                                      |
| <b>302</b> | The game is suspended due to a power blackout at the venue.       |
| <b>303</b> | The game is suspended due to crowd trouble.                       |
| <b>304</b> | The game is suspended due to bad weather conditions.              |
| <b>305</b> | The game is suspended due to fog.                                 |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.            |
| <b>308</b> | The game is suspended due to fighting players.                    |
| <b>309</b> | The game is suspended due to an injured referee.                  |
| <b>310</b> | The game is suspended due to an unknown reason.                   |

| ID         | Description  |
|------------|--|
| <b>311</b> | The game is suspended due to a water break.  |
| <b>313</b> | The game is suspended due to broken equipment.   |
| <b>315</b> | The game is suspended due to a serious injury.   |
| <b>317</b> | The game is suspended due to an injured player.  |
| <b>339</b> | The game is suspended but no official announcement was made at the venue.                                |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>408</b> | The game is officially cancelled due to bad pitch conditions.  |
| <b>409</b> | The game is officially cancelled due to a waterlogged pitch.   |
| <b>410</b> | The game is officially cancelled due to a frozen pitch.  |
| <b>411</b> | The game is officially cancelled due to heavy snow.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                       |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                 |
| <b>507</b> | Our coverage is continued via TV due to technical problems.  |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |

| ID         | Description  |
|------------|--|
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                     |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |
| <b>602</b> | The number of players on the field is correct: %PH1% vs. %PH2%   |
| <b>603</b> | A field player of %COMP1% is acting as a goalkeeper.   |
| <b>604</b> | A field player of %COMP2% is acting as a goalkeeper.   |
| <b>605</b> | There will be no extra time. A direct penalty shootout will be taken.  |
| <b>606</b> | A red card was shown but no player has been sent off.  |
| <b>607</b> | A bench player of %COMP1% received a red card.   |
| <b>608</b> | A bench player of %COMP2% received a red card.   |
| <b>611</b> | An injured player of %COMP1% left the field but no more substitutions are available.                         |
| <b>612</b> | An injured player of %COMP2% left the field but no more substitutions are available.                         |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running.       |

| ID         | Description   |
|------------|---|
| <b>628</b> | A bench player of %COMP1% received a yellow card.   |
| <b>629</b> | A bench player of %COMP2% received a yellow card.   |
| <b>631</b> | The next period will start with an official delay.  |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.                |
| <b>638</b> | There is an official delay of the game start. The players are still warming up.               |
| <b>647</b> | %COMP1% started the first half.   |
| <b>648</b> | %COMP2% started the first half.   |
| <b>649</b> | %COMP1% started the second half.  |
| <b>650</b> | %COMP2% started the second half.  |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet. |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running. |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.                     |
| <b>655</b> | The regular game time is %COUNT% x %MIN% minutes.   |
| <b>657</b> | Sin Bin: The current number of players on the field is: %PH% vs. %PA%.                        |
| <b>701</b> | Other (free text)   |

**Table 79 – Soccer System Messages**

## 8.9.2 Basketball

| ID         | Description  |
|------------|--|
| <b>101</b> | Please hold on, the connection in this area is down.   |
| <b>102</b> | Please hold on, we are rechecking the score.           |
| <b>103</b> | Please hold on, our coverage might start with a delay. |
| <b>104</b> | Please hold on, we are trying to solve the problem.    |
| <b>110</b> | Please hold on, the referees are checking the score.   |
| <b>127</b> | Please hold on, we are rechecking the foul score.      |
| <b>201</b> | The score is correct: (%SCORE%)                        |
| <b>206</b> | The statistics are confirmed.                          |



| ID         | Description  |
|------------|--|
| <b>226</b> | The foul score for quarter (%TS%) is correct: (%SCORE%)  |
| <b>227</b> | The number of personal fouls is correct: (%SCORE%)   |
| <b>228</b> | The foul score is correct: %SCORE%   |
| <b>301</b> | The game has been restarted.   |
| <b>302</b> | The game is suspended due to a power blackout at the venue.  |
| <b>303</b> | The game is suspended due to crowd trouble.  |
| <b>304</b> | The game is suspended due to bad weather conditions.   |
| <b>305</b> | The game is suspended due to fog.  |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.   |
| <b>308</b> | The game is suspended due to fighting players.   |
| <b>309</b> | The game is suspended due to an injured referee.   |
| <b>310</b> | The game is suspended due to an unknown reason.  |
| <b>312</b> | The game is suspended due to a pending table officials' decision.  |
| <b>313</b> | The game is suspended due to broken equipment.   |
| <b>315</b> | The game is suspended due to a serious injury.   |
| <b>316</b> | The game is suspended. The referees are rechecking the last play.  |
| <b>317</b> | The game is suspended due to an injured player.  |
| <b>327</b> | The game is suspended due to a commercial break.   |
| <b>329</b> | The game is suspended. The referee is adjusting the scoreboard.  |
| <b>333</b> | The game is suspended. The referees are adjusting the game clock.  |
| <b>339</b> | The game is suspended but no official announcement was made at the venue.                                |
| <b>340</b> | The game is suspended. The referees are rechecking the score.  |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |

| ID         | Description  |
|------------|--|
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                    |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                           |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                     |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                     |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |

| ID         | Description  |
|------------|--|
| <b>611</b> | An injured player of %COMP1% left the field but no more substitutions are available.   |
| <b>612</b> | An injured player of %COMP2% left the field but no more substitutions are available.   |
| <b>614</b> | The table officials corrected the current game score.  |
| <b>615</b> | The table officials adjusted the current game time.  |
| <b>616</b> | The game is not finished yet. The referees are rechecking the score.   |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running.                           |
| <b>625</b> | A technical foul was committed during the break. The free throw awarded to %COMP1% will be taken before the next quarter starts. |
| <b>626</b> | A technical foul was committed during the break. The free throw awarded to %COMP2% will be taken before the next quarter starts. |
| <b>631</b> | The next period will start with an official delay.   |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.   |
| <b>368</b> | There is an official delay of the game start. The players are still warming up.  |
| <b>651</b> | The score has been corrected after the game was stopped. The correct score is %SCORE%.   |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet.                                    |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running.                                    |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.  |
| <b>655</b> | The regular game time is %COUNT% x %MIN% minutes.  |
| <b>701</b> | Other (free text)  |

**Table 80 – Basketball System Messages**

### 8.9.3 Ice Hockey

| ID         | Description  |
|------------|--|
| <b>101</b> | Please hold on, the connection in this area is down.   |
| <b>102</b> | Please hold on, we are rechecking the score.           |
| <b>103</b> | Please hold on, our coverage might start with a delay. |
| <b>104</b> | Please hold on, we are trying to solve the problem.    |

| ID         | Description   |
|------------|---|
| <b>110</b> | Please hold on, the referees are rechecking the score.                    |
| <b>117</b> | Please hold on, we are rechecking the number of suspensions.              |
| <b>121</b> | Please hold on, we are rechecking the number of penalty shots.            |
| <b>201</b> | The score is correct: (%SCORE%)   |
| <b>206</b> | The statistics are confirmed.   |
| <b>214</b> | The number of penalties is correct: (%SCORE%)                             |
| <b>217</b> | The total number of suspensions is correct: (%SCORE%)                     |
| <b>301</b> | The game has been restarted.  |
| <b>302</b> | The game is suspended due to a power blackout at the venue.               |
| <b>303</b> | The game is suspended due to crowd trouble.                               |
| <b>304</b> | The game is suspended due to bad weather conditions.                      |
| <b>305</b> | The game is suspended due to fog.   |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.                    |
| <b>308</b> | The game is suspended due to fighting players.                            |
| <b>309</b> | The game is suspended due to an injured referee.                          |
| <b>310</b> | The game is suspended due to an unknown reason.                           |
| <b>313</b> | The game is suspended due to broken equipment.                            |
| <b>315</b> | The game is suspended due to a serious injury.                            |
| <b>317</b> | The game is suspended due to an injured player.                           |
| <b>327</b> | The game is suspended due to a commercial break.                          |
| <b>328</b> | The game is suspended due to a destroyed ice rink.                        |
| <b>329</b> | The game is suspended. The referee is adjusting the scoreboard.           |
| <b>330</b> | The game is suspended. The ice is too wet.                                |
| <b>331</b> | The game is suspended. The ice master is in the rink.                     |
| <b>332</b> | The game is suspended due to ice cleaning.                                |
| <b>333</b> | The game is suspended. The referees are adjusting the game clock.         |
| <b>339</b> | The game is suspended but no official announcement was made at the venue. |

| ID         | Description  |
|------------|--|
| <b>340</b> | The game is suspended. The referees are rechecking the score.  |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>411</b> | The game is officially cancelled due to heavy snow.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                       |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                 |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                 |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |

| ID         | Description  |
|------------|--|
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |
| <b>603</b> | A field player of %COMP1% is acting as a goalkeeper.   |
| <b>604</b> | A field player of %COMP2% is acting as a goalkeeper.   |
| <b>605</b> | There will be no extra time. A direct penalty shootout will be taken.  |
| <b>616</b> | The game is not finished yet. The referees are rechecking the score.   |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running.       |
| <b>631</b> | The next period will start with an official delay.   |
| <b>632</b> | There are coincidental penalties that do not affect the number of players on ice.                            |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.                               |
| <b>638</b> | There is an official delay of the game start. The players are still warming up.                              |
| <b>645</b> | The overtime is played 4 on 4.   |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet.                |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running.                |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.                                    |
| <b>655</b> | The regular game time is %COUNT% x %MIN% minutes.  |
| <b>656</b> | The overtime is played 3 on 3.   |
| <b>701</b> | Other (free text)  |

**Table 81 – Ice Hockey System Messages**

#### 8.9.4 Volleyball

| ID         | Description   |
|------------|---|
| <b>101</b> | Please hold on, the connection in this area is down.                      |
| <b>102</b> | Please hold on, we are rechecking the score.                              |
| <b>103</b> | Please hold on, our coverage might start with a delay.                    |
| <b>104</b> | Please hold on, we are trying to solve the problem.                       |
| <b>110</b> | Please hold on, the referees are rechecking the score.                    |
| <b>114</b> | Please hold on, we are rechecking the number of penalties.                |
| <b>115</b> | Please hold on, we are rechecking the number of expulsions.               |
| <b>116</b> | Please hold on, we are rechecking the number of disqualifications.        |
| <b>201</b> | The score is correct: (%SCORE%)   |
| <b>219</b> | The number of penalties is correct: (%SCORE%)                             |
| <b>301</b> | The game has been restarted.  |
| <b>302</b> | The game is suspended due to a power blackout at the venue.               |
| <b>303</b> | The game is suspended due to crowd trouble.                               |
| <b>304</b> | The game is suspended due to bad weather conditions.                      |
| <b>305</b> | The game is suspended due to fog.   |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.                    |
| <b>308</b> | The game is suspended due to fighting players.                            |
| <b>309</b> | The game is suspended due to an injured referee.                          |
| <b>310</b> | The game is suspended due to an unknown reason.                           |
| <b>313</b> | The game is suspended due to broken equipment.                            |
| <b>315</b> | The game is suspended due to a serious injury.                            |
| <b>317</b> | The game is suspended due to an injured player.                           |
| <b>329</b> | The game is suspended. The referee is adjusting the scoreboard.           |
| <b>339</b> | The game is suspended but no official announcement was made at the venue. |
| <b>340</b> | The game is suspended. The referees are rechecking the score.             |

| ID         | Description  |
|------------|--|
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                       |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                 |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                 |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |



| ID         | Description  |
|------------|--|
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running.       |
| <b>631</b> | The next period will start with an official delay.   |
| <b>634</b> | Penalty 1 before the set started. The next set will start with a point score of 0:1.                         |
| <b>635</b> | Penalty 2 before the set started. The next set will start with a point score of 1:0.                         |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.                               |
| <b>638</b> | There is an official delay of the game start. The players are still warming up.                              |
| <b>651</b> | The score has been corrected after the game was stopped. The correct score is %SCORE%.                       |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet.                |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running.                |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.                                    |
| <b>701</b> | Other (free text)  |

**Table 82 – Volleyball System Messages**

#### 8.9.5 Beach Volleyball

| ID         | Description  |
|------------|--|
| <b>101</b> | Please hold on, the connection in this area is down.   |
| <b>102</b> | Please hold on, we are rechecking the score.           |
| <b>103</b> | Please hold on, our coverage might start with a delay. |
| <b>104</b> | Please hold on, we are trying to solve the problem.    |
| <b>110</b> | Please hold on, the referees are rechecking the score. |

| ID         | Description  |
|------------|--|
| <b>114</b> | Please hold on, we are rechecking the number of penalties.   |
| <b>115</b> | Please hold on, we are rechecking the number of expulsions.  |
| <b>116</b> | Please hold on, we are rechecking the number of disqualifications.                                       |
| <b>201</b> | The score is correct: (%SCORE%)  |
| <b>219</b> | The number of penalties is correct: (%SCORE%)  |
| <b>301</b> | The game has been restarted.   |
| <b>302</b> | The game is suspended due to a power blackout at the venue.  |
| <b>303</b> | The game is suspended due to crowd trouble.  |
| <b>304</b> | The game is suspended due to bad weather conditions.   |
| <b>305</b> | The game is suspended due to fog.  |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.   |
| <b>308</b> | The game is suspended due to fighting players.   |
| <b>309</b> | The game is suspended due to an injured referee.   |
| <b>310</b> | The game is suspended due to an unknown reason.  |
| <b>313</b> | The game is suspended due to broken equipment.   |
| <b>315</b> | The game is suspended due to a serious injury.   |
| <b>317</b> | The game is suspended due to an injured player.  |
| <b>329</b> | The game is suspended. The referee is adjusting the scoreboard.  |
| <b>339</b> | The game is suspended but no official announcement was made at the venue.                                |
| <b>340</b> | The game is suspended. The referees are rechecking the score.  |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |

| ID         | Description  |
|------------|--|
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                           |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                     |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                     |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |

| ID         | Description  |
|------------|--|
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running. |
| <b>631</b> | The next period will start with an official delay.   |
| <b>634</b> | Penalty 1 before the set started. The next set will start with a point score of 0:1.                   |
| <b>635</b> | Penalty 2 before the set started. The next set will start with a point score of 1:0.                   |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.                         |
| <b>638</b> | There is an official delay of the game start. The players are still warming up.                        |
| <b>651</b> | The score has been corrected after the game was stopped. The correct score is %SCORE%.                 |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet.          |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running.          |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.                              |
| <b>701</b> | Other (free text)  |

**Table 83 – Beach Volleyball System Messages**

#### 8.9.6 Handball

| ID         | Description   |
|------------|---|
| <b>101</b> | Please hold on, the connection in this area is down.          |
| <b>102</b> | Please hold on, we are rechecking the score.                  |
| <b>103</b> | Please hold on, our coverage might start with a delay.        |
| <b>104</b> | Please hold on, we are trying to solve the problem.           |
| <b>105</b> | Please hold on, we are rechecking the number of red cards.    |
| <b>108</b> | Please hold on, we are rechecking the number of yellow cards. |
| <b>110</b> | Please hold on, the referees are rechecking the score.        |
| <b>117</b> | Please hold on, we are rechecking the number of suspensions.  |
| <b>118</b> | Please hold on, we are rechecking the number of 7-metre.      |
| <b>201</b> | The score is correct: (%SCORE%)                               |
| <b>202</b> | The number of red cards is correct: (%SCORE%)                 |
| <b>205</b> | The number of yellow cards is correct: (%SCORE%)              |

| ID         | Description  |
|------------|--|
| <b>217</b> | The total number of suspensions is correct: (%SCORE%)  |
| <b>218</b> | The number of 7-metre is correct: (%SCORE%)  |
| <b>301</b> | The game has been restarted.   |
| <b>302</b> | The game is suspended due to a power blackout at the venue.  |
| <b>303</b> | The game is suspended due to crowd trouble.  |
| <b>304</b> | The game is suspended due to bad weather conditions.   |
| <b>305</b> | The game is suspended due to fog.  |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.   |
| <b>308</b> | The game is suspended due to fighting players.   |
| <b>309</b> | The game is suspended due to an injured referee.   |
| <b>310</b> | The game is suspended due to an unknown reason.  |
| <b>312</b> | The game is suspended due to broken equipment.   |
| <b>315</b> | The game is suspended due to a serious injury.   |
| <b>317</b> | The game is suspended due to an injured player.  |
| <b>333</b> | The game is suspended. The referees are adjusting the game clock.  |
| <b>339</b> | The game is suspended but no official announcement was made at the venue.                                |
| <b>340</b> | The game is suspended. The referees are rechecking the score.  |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |

| ID         | Description  |
|------------|--|
| <b>419</b> | The new game start date is %DATE% CET. The new ticker %TICKERID% has been created.                           |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.   |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.                                     |
| <b>508</b> | Our coverage of this game is changed from Live to TV.  |
| <b>509</b> | The game will be covered live from the venue.  |
| <b>510</b> | The game will be played on a neutral venue.  |
| <b>512</b> | Our coverage was started in time.  |
| <b>515</b> | Our coverage is temporarily suspended due to a commercial break during the TV broadcast.                     |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.   |
| <b>529</b> | The game will be played at the venue of %COMP2%.   |
| <b>530</b> | The game officially started at %TIME% CET.   |
| <b>531</b> | Our game start time is correct.  |
| <b>532</b> | Our coverage is suspended due to a TV broadcasting problem.  |
| <b>533</b> | There is an official delay of the game start due to a late arrival of the competitors.                       |
| <b>534</b> | The new game start date is %DATE% CET.   |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.   |
| <b>537</b> | The new game start date is %DATE% CET. Our coverage is not confirmed yet.                                    |
| <b>538</b> | Our coverage of this game is changed from Live to TV. The expected delay of the TV picture is %SEC% seconds. |
| <b>603</b> | A field player of %COMP1% is acting as a goalkeeper.   |
| <b>604</b> | A field player of %COMP2% is acting as a goalkeeper.   |
| <b>616</b> | The game is not finished yet. The referees are rechecking the score.   |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |

| ID         | Description  |
|------------|--|
| <b>624</b> | There is an official delay of the game start because the previous game at this venue is still running. |
| <b>631</b> | The next period will start with an official delay.   |
| <b>637</b> | There is an official delay of the game start. The referees did not arrive yet.                         |
| <b>638</b> | There is an official delay of the game start. The players are still warming up.                        |
| <b>641</b> | There will be no extra time. A direct 7-metre throwing will be taken.                                  |
| <b>647</b> | %COMP1% started the first half.  |
| <b>648</b> | %COMP2% started the first half.  |
| <b>649</b> | %COMP1% started the second half.   |
| <b>650</b> | %COMP2% started the second half.   |
| <b>651</b> | The score has been corrected after the game was stopped. The correct score is %SCORE%.                 |
| <b>652</b> | Our coverage of the game was started prematurely. The game was reset and has not started yet.          |
| <b>653</b> | Our coverage of the game was stopped prematurely. The game was reopened and is still running.          |
| <b>654</b> | Our coverage of the game is continued by phone due to technical problems.                              |
| <b>655</b> | The regular game time is %COUNT% x %MIN% minutes.  |
| <b>701</b> | Other (free text)  |

**Table 84 – Handball System Messages**

#### 8.9.7 Cricket

| ID         | Description   |
|------------|---|
| <b>101</b> | Please hold on, the connection in this area is down.        |
| <b>102</b> | Please hold on, we are rechecking the score.                |
| <b>103</b> | Please hold on, our coverage might start with a delay.      |
| <b>104</b> | Please hold on, we are trying to solve the problem.         |
| <b>201</b> | The score is correct: (%SCORE%)                             |
| <b>301</b> | The game has been restarted.                                |
| <b>302</b> | The game is suspended due to a power blackout at the venue. |
| <b>303</b> | The game is suspended due to crowd trouble.                 |

| ID         | Description  |
|------------|--|
| <b>304</b> | The game is suspended due to bad weather conditions.   |
| <b>305</b> | The game is suspended due to fog.  |
| <b>306</b> | The game is suspended due to pyrotechnics being fired.   |
| <b>308</b> | The game is suspended due to fighting players.   |
| <b>309</b> | The game is suspended due to an injured referee.   |
| <b>310</b> | The game is suspended due to an unknown reason.  |
| <b>311</b> | The game is suspended due to a water break.  |
| <b>313</b> | The game is suspended due to broken equipment.   |
| <b>315</b> | The game is suspended due to a serious injury.   |
| <b>316</b> | The game is suspended. The referees are rechecking the last play.  |
| <b>317</b> | The game is suspended due to an injured player.  |
| <b>329</b> | The game is suspended. The referee is adjusting the scoreboard.  |
| <b>339</b> | The game is suspended but no official announcement was made at the venue.                                |
| <b>341</b> | The game is suspended due to a lunch break.  |
| <b>342</b> | The game is suspended due to rain.   |
| <b>343</b> | The game is suspended due to a tea break.  |
| <b>344</b> | The game is suspended due to a drink break.  |
| <b>345</b> | The game is suspended due to a dinner break.   |
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>408</b> | The game is officially cancelled due to bad pitch conditions.  |



| ID         | Description  |
|------------|--|
| <b>409</b> | The game is officially cancelled due to a waterlogged pitch.                   |
| <b>410</b> | The game is officially cancelled due to a frozen pitch.                        |
| <b>411</b> | The game is officially cancelled due to heavy snow.                            |
| <b>412</b> | The game is officially cancelled due to fog.                                   |
| <b>417</b> | The game was officially abandoned by the referee.                              |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE%. The new ticker %TICKERID% has been created. |
| <b>501</b> | Our coverage will start in time.   |
| <b>502</b> | There is an official delay of the game start.                                  |
| <b>504</b> | Our coverage started with %SEC% seconds delay.                                 |
| <b>506</b> | Our coverage started with %SEC% seconds delay due to technical problems.       |
| <b>510</b> | The game will be played on a neutral venue.                                    |
| <b>512</b> | Our coverage was started in time.  |
| <b>518</b> | Our coverage is suspended.   |
| <b>522</b> | The new game start time is %TIME% CET.   |
| <b>528</b> | The game will be played at the venue of %COMP1%.                               |
| <b>529</b> | The game will be played at the venue of %COMP2%.                               |
| <b>530</b> | The game officially started at %TIME% CET.                                     |
| <b>534</b> | The new game start date is %DATE%.   |
| <b>535</b> | The next session starts on %DATE% at %TIME% CET.                               |
| <b>536</b> | There is an official delay of the game start due to crowd trouble.             |
| <b>537</b> | The new game start date is %DATE%. Our coverage is not confirmed yet.          |
| <b>539</b> | The game is temporarily not resumed due to rain.                               |
| <b>617</b> | The coach of %COMP1% got ejected.  |
| <b>622</b> | The coach of %COMP2% got ejected.  |
| <b>633</b> | There is an official delay of the game start due to rain!                      |

| ID         | Description       |
|------------|-------------------|
| <b>701</b> | Other (free text) |

**Table 85 – Cricket System Messages**

#### 8.9.8 Baseball

| ID         | Description  |
|------------|--|
| <b>401</b> | We are sorry, we have to cancel our coverage of this game.   |
| <b>402</b> | The game is officially cancelled.  |
| <b>403</b> | The game is officially postponed. The new date is unknown.   |
| <b>404</b> | We are sorry, we have to cancel our coverage of this game due to an unavailable connection in this area. |
| <b>405</b> | We are sorry, we have to cancel our coverage of this game due to technical problems.                     |
| <b>406</b> | We are sorry, we have to cancel our coverage of this game due to a TV broadcasting error.                |
| <b>407</b> | The game is officially cancelled due to bad weather conditions.  |
| <b>408</b> | The game is officially cancelled due to bad pitch conditions.  |
| <b>409</b> | The game is officially cancelled due to a waterlogged pitch.   |
| <b>410</b> | The game is officially cancelled due to a frozen pitch.  |
| <b>411</b> | The game is officially cancelled due to heavy snow.  |
| <b>412</b> | The game is officially cancelled due to fog.   |
| <b>417</b> | The game was officially abandoned by the referee.  |
| <b>418</b> | The game was officially postponed.   |
| <b>419</b> | The new game start date is %DATE%. The new ticker %TICKERID% has been created.                           |
| <b>701</b> | Other (free text)  |

**Table 86 – Baseball System Messages**

#### 8.10 Sports Mapping

| ID       | Description |
|----------|-------------|
| <b>1</b> | Soccer      |

| ID | Description      |
|----|------------------|
| 2  | Basketball       |
| 4  | Handball         |
| 8  | Ice Hockey       |
| 9  | Volleyball       |
| 16 | Beach Volleyball |
| 17 | Baseball         |
| 19 | Cricket          |

Table 87 – Sports Mapping

## 8.11 Player Position Mapping

### 8.11.1 Soccer

| ID | Description |
|----|-------------|
| 0  | Goal keeper |
| 1  | Defender    |
| 2  | Midfielder  |
| 3  | Attacker    |
| 4  | Unknown     |
| 5  | Coach       |

Table 88 – Soccer Player Position Mappings

### 8.11.2 Basketball

| ID | Description   |
|----|---------------|
| 6  | Small forward |
| 7  | Power forward |
| 8  | Point guard   |
| 9  | Center        |

| ID        | Description    |
|-----------|----------------|
| <b>10</b> | Shooting guard |

**Table 89 – Basketball Player Position Mappings**

#### 8.11.3 Ice Hockey

| ID        | Description |
|-----------|-------------|
| <b>11</b> | Goaltender  |
| <b>12</b> | Defenseman  |
| <b>13</b> | Center      |
| <b>14</b> | Winger      |
| <b>15</b> | Coach       |
| <b>16</b> | Forward     |
| <b>17</b> | Unknown     |

**Table 90 – Ice Hockey Player Position Mappings**

#### 8.11.4 Baseball

| ID        | Description       |
|-----------|-------------------|
| <b>16</b> | Pitcher           |
| <b>17</b> | Right Fielder     |
| <b>18</b> | Third Baseman     |
| <b>19</b> | Catcher           |
| <b>20</b> | Left Fielder      |
| <b>21</b> | Short Stop        |
| <b>22</b> | First Baseman     |
| <b>23</b> | Second Baseman    |
| <b>24</b> | Center Fielder    |
| <b>25</b> | Designated Hitter |
| <b>26</b> | Unknown           |

| ID        | Description |
|-----------|-------------|
| <b>27</b> | Infielder   |
| <b>28</b> | Outfielder  |

**Table 91 – Baseball Player Position Mappings**

## 8.12 Player Rating Mapping

| ID       | Description |
|----------|-------------|
| <b>0</b> | Unrated     |
| <b>1</b> | Premium     |
| <b>2</b> | Intrinsic   |
| <b>3</b> | Established |
| <b>4</b> | Fringe      |
| <b>5</b> | Infrequent  |

**Table 92 – Player Rating Mappings**

## 8.13 Score Mapping

This chapter defines how scores are mapped to the game event attributes.

### 8.13.1 Soccer

| Field             | Description          |
|-------------------|----------------------|
| <b>score_home</b> | Goal score of team 1 |
| <b>score_away</b> | Goal score of team 2 |

**Table 93 – Soccer Score Mappings**

### 8.13.2 Basketball

| Field             | Description           |
|-------------------|-----------------------|
| <b>score_home</b> | Point score of team 1 |
| <b>score_away</b> | Point score of team 2 |

**Table 94 – Basketball Score Mappings**

### 8.13.3 Ice Hockey

| Field             | Description   |
|-------------------|---|
| <b>score_home</b> | Goals Team 1  |
| <b>score_away</b> | Goals Team 2  |
| <b>score</b>      | Current goal score in the running period (only used in periods 1/2/3, overtime and penalty shootout, not in breaks).<br>> <b>1475/2499</b> : Goal score (goals in current period) |

Table 95 – Ice Hockey Score Mappings

### 8.13.4 Volleyball

| Field             | Description   |
|-------------------|---|
| <b>score_home</b> | Sets won Team 1   |
| <b>score_away</b> | Sets won Team 2   |
| <b>score</b>      | Current point score in the running set (only used in 'Set' states, not in breaks):<br>> <b>1421/2445</b> : Set score (points scored in current set) |

Table 96 – Volleyball Score Mappings

### 8.13.5 Beach Volleyball

| Field             | Description   |
|-------------------|---|
| <b>score_home</b> | Sets won Team 1   |
| <b>score_away</b> | Sets won Team 2   |
| <b>score</b>      | Current point score in the running set (only used in 'Set' states, not in breaks):<br>> <b>1421/2445</b> : Set score (points scored in current set) |

Table 97 – Beach Volleyball Score Mappings

### 8.13.6 Handball

| Field             | Description  |
|-------------------|--------------|
| <b>score_home</b> | Goals Team 1 |
| <b>score_away</b> | Goals Team 2 |

Table 98 – Handball Score Mappings

### 8.13.7 Cricket

| Field             | Description   |
|-------------------|---|
| <b>score_home</b> | Runs Team 1   |
| <b>score_away</b> | Runs Team 2   |
| <b>score</b>      | Current Wicket and Legal ball score in the running inning (only used in 'Inning' states, not in breaks):<br>> <b>1936/2960</b> : Wickets lost score (in current inning)<br>> <b>1959/2983</b> : Legal balls (in current inning) |

Table 99 – Cricket Score Mappings

**Note:** 1959(Home Competitor) and 2983(Foreign Competitor) are no real event codes, but just statistic values to show the balls for each team in the current inning.

### 8.13.8 Baseball

| Field             | Description  |
|-------------------|--|
| <b>score_home</b> | Runs Team 1  |
| <b>score_away</b> | Runs Team 2  |
| <b>score</b>      | Current Run, Hit, Error score in the running inning (only used in 'Inning' states, not in breaks) and also the current pitch count:<br>> <b>1860/2884</b> : Run score (in current inning)<br>> <b>1868/2892</b> : Hit score (in current inning)<br>> <b>1873/2897</b> : Error score (in current inning)<br>> <b>1897</b> : Pitch count (for the current pitcher) |

Table 100 – Baseball Score Mappings

**Note:** 1897 is no real event code, but just a statistic value to show the pitch count for the current pitcher.

## 8.14 Squad Type Mapping

| ID       | Description |
|----------|-------------|
| <b>0</b> | None        |
| <b>1</b> | Starting 11 |
| <b>2</b> | Suspended   |

| ID | Description     |
|----|-----------------|
| 3  | Injured         |
| 4  | Bench           |
| 5  | Reserve         |
| 6  | Starting player |

**Table 101 – Squad Type Mappings**

## 8.15 Competition Parameter Mapping

This chapter gives an overview of optional league parameters that could be included in fixtures.

### 8.15.1 Soccer

| ID | Description        | Type    | Explanation   |
|----|--------------------|---------|---|
| 37 | friendlyGame       | Boolean | 'true' if the game is being played as friendly              |
| 38 | hasAssists         | Boolean | 'true' if the game features assist information              |
| 42 | hasMatchFormations | Boolean | 'true' if the game features information on match formations |
| 43 | sinBinMinutes      | Integer | Sin Bin duration in minutes. '0' = no Sin Bin               |
| 45 | VAR                | Boolean | 'true' if the game features VAR information                 |

**Table 102 – Soccer Competition Parameters**

### 8.15.2 Basketball

| ID | Description       | Type    | Explanation  |
|----|-------------------|---------|--|
| 4  | applyNbaRules     | Boolean | 'true' if NBA-specific rules are applied to the tournament/league.   |
| 5  | applyCollegeRules | Boolean | 'true' if NCAA-specific rules are applied to the tournament/league.<br>Note: If NCAA rules are applied, games are played in two halves instead of four quarters. Instead of START/STOP_Qx/STOP_QUARTER, START/STOP_RT <sub>x</sub> events are sent. Ticker states are also affected by the NCAA rule set (see chapter 8.3.2 <i>Basketball</i> ). |

**Table 103 – Basketball Competition Parameters**



### 8.15.3 Handball

| ID        | Description    | Type    | Explanation   |
|-----------|----------------|---------|---|
| <b>27</b> | doubleOvertime | Boolean | 'true' when a tie needs to be broken and an overtime period of 2x5 minutes is played. |

**Table 104 – Handball Competition Parameters**

### 8.15.4 Ice Hockey

| ID        | Description           | Type    | Explanation   |
|-----------|-----------------------|---------|---|
| <b>36</b> | additionalPenShootout | Boolean | 'true' if the game features an additional penalty shootout in case of a draw. |

**Table 105 – Ice Hockey Competition Parameters**

### 8.15.5 Volleyball

| ID        | Description     | Type    | Explanation  |
|-----------|-----------------|---------|--|
| <b>25</b> | winningSets     | Integer | The number of sets to win a match in this competition. |
| <b>39</b> | goldenSetPoints | Integer | The number of points to win the golden set.            |

**Table 106 – Volleyball Competition Parameters**

### 8.15.6 Beach Volleyball

| ID        | Description | Type    | Explanation  |
|-----------|-------------|---------|--|
| <b>26</b> | winningSets | Integer | The number of sets to win a match in this competition. |

**Table 107 – Beach Volleyball Competition Parameters**

## 8.15.7 Cricket

| ID | Description | Type    | Explanation                         |
|----|-------------|---------|-------------------------------------|
| 40 | matchFormat | Integer | 1=Mens Test                         |
|    |             |         | 2=Mens ODI                          |
|    |             |         | 3=Mens Twenty20                     |
|    |             |         | 4=Mens Domestic Test                |
|    |             |         | 5=Mens Domestic One Day             |
|    |             |         | 6=Mens Domestic Twenty20            |
|    |             |         | 7=Mens Non Official Test            |
|    |             |         | 8=Mens Non Official One Day         |
|    |             |         | 9=Mens Non Official Twenty20        |
|    |             |         | 10=Cat training                     |
|    |             |         | 11=Dual Collection Fast Test Format |
|    |             |         | 12=Dual Collection Fast ODI Format  |
|    |             |         | 13=Dual Collection Fast T20 Format  |
|    |             |         | 14=Womens Test                      |
|    |             |         | 15=Womens ODI                       |
|    |             |         | 16=Womens Twenty20                  |
|    |             |         | 17=Womens Domestic Test             |
|    |             |         | 18=Womens Domestic One Day          |
|    |             |         | 19=Womens Domestic Twenty20         |
|    |             |         | 20=Womens Non Official Test         |
|    |             |         | 21=Womens Non Official One Day      |
|    |             |         | 22=Womens Non Official Twenty20     |

**Table 108 – Cricket Competition Parameters**

## 8.16 Value Event Mappings

This chapter describes all events having value event data ('value events').

### 8.16.1 Jersey Colour Event

Jersey colours are available for team-based sports.

| ID  | EventCode      | Value Type ID | Value Type   | Data Type | Description   |
|-----|----------------|---------------|--------------|-----------|---|
| 524 | Jersey Changed | 15            | TeamId       | Long      | ID of the team the jersey data was sent for.                                |
|     |                | 16            | shirtColor1  | Integer   | 4-byte colour value<br>Bytenumber:<br>4=Alpha<br>3=Red<br>2=Green<br>1=Blue |
|     |                | 17            | shirtColor2  | Integer   |   |
|     |                | 18            | pantsColor   | Integer   |   |
|     |                | 19            | socksColor   | Integer   |   |
|     |                | 20            | jerseyDesign | Integer   | Design pattern of the jersey:<br>0=plain<br>1=multicolor                    |

| ID | EventCode | Value Type ID | Value Type | Data Type | Description            |
|----|-----------|---------------|------------|-----------|------------------------|
|    |           | 25            | homeTeam   | Boolean   | True if sent for home. |

**Table 109 – Jersey Colour Event Mappings**

Example Colour Value: -65536 (as Hex **FF****FF****00****00**) will show the colour red.

- > FF Alpha Value
- > **FF** Red Color Value
- > **00** Green Color Value
- > **00** Blue Color Value

### 8.16.2 Time Adaption Event

The time adaption event is available for ice hockey and handball.

| ID         | EventCode     | Value Type ID | Value Type   | Data Type | Description  |
|------------|---------------|---------------|--------------|-----------|--|
| <b>282</b> | TIME_ADAPTION | 22            | TimeAdaption | Integer   | TIME_ADAPTION is sent with 'related event' information to a scoring/statistical event (goals/suspensions/penalties) or period start events. The adaption value is passed in seconds - positive values indicate an event entered with delay, whereas negative adaption values indicate events sent too early. |

**Table 110 – Time Adaption Event Mappings**

### 8.16.3 Generic Game Conditions Value Event

| ID         | EventCode | Value Type ID | Value Type         | Data Type | Description                                   |
|------------|-----------|---------------|--------------------|-----------|---|
| <b>286</b> | GGCC      | 75            | AttendanceID       | Integer   | See chapter 8.6 <i>Game Condition Mapping</i> |
|            |           | 76            | WeatherConditionID | Integer   |   |
|            |           | 77            | PitchConditionID   | Integer   |   |
|            |           | 78            | MovementID         | Integer   |   |
|            |           | 79            | BounceID           | Integer   |   |
|            |           | 80            | LightID            | Integer   |   |
|            |           | 81            | MatchDay           | Integer   | The unique ID of the respective ball.         |

**Table 111 – Generic Game Condition Value Event Mappings**

## 8.16.4 Ball Data Value Events

| ID          | EventCode            | Value Type ID | Value Type            | Data Type | Description  |
|-------------|----------------------|---------------|-----------------------|-----------|--|
|             |                      | 58            | Ball ID Ext           | Long      | The unique ID of the respective ball.  |
|             |                      | 59            | Over Nr               | Integer   | The number of the over within the innings.   |
|             |                      | 60            | Over Ball Nr          | Integer   | The number of the ball within the over. This can be greater than 6 (repeated attempts).  |
|             |                      | 62            | Batting Player ID Ext | Long      | The unique ID of the batsman.  |
|             |                      | 64            | Batting Player Name   | String    | The name of the batsman.   |
|             |                      | 66            | Bowler Player ID Ext  | Long      | The unique ID of the bowler.   |
|             |                      | 68            | Bowler Player Name    | String    | The name of the bowler.  |
|             |                      | 69            | Batsman Hand          | Integer   | 1=right-handed<br>2=left-handed  |
|             |                      | 70            | Bowler Hand           | Integer   | 1=right-handed<br>2=left-handed  |
| <b>1922</b> | CR_BALL_DATA1        |               |                       |           | 1= Middled<br>2= Missed<br>3= Thick edge<br>4= Outside edge<br>5= Inside edge<br>6= Top edge<br>7= Bottom edge<br>8= Padded<br>9= Left<br>10=Mis-timed<br>11=Bat pad<br>12=Hit pad<br>13=None<br>14=Leading edge<br>15=Hit body<br>16=Hit helmet<br>17=Gloved<br>18=Shoulders arms<br>19=Well timed<br>20=No shot<br>21=Play + miss<br>22=False shot<br>23=Neutral<br>24=Strong<br>25=Missed (Leg Side)<br>26=Play and Miss (Leg Side)<br>27=Spliced |
| <b>1923</b> | CR_BALL_DATA2        |               |                       |           |  |
| <b>2946</b> | CR_BALL_DATA_UPDATE1 |               |                       |           |  |
| <b>2947</b> | CR_BALL_DATA2        | 71            | Batting Connection    | Integer   | 1=Fast seam<br>2=Medium seam<br>3=Off spin<br>4=Leg spin<br>5=Orthodox<br>6=Unorthodox   |
|             |                      | 72            | Bowling type          | Integer   |  |

| ID | EventCode | Value Type ID | Value Type      | Data Type | Description   |
|----|-----------|---------------|-----------------|-----------|---|
|    |           | 73            | Bowling from    | Integer   | 1=Over<br>2=Round   |
|    |           | 74            | Leg by          | Integer   | The number of leg byes from a delivery.   |
|    |           | 88            | Field Direction | Integer   | The direction of the ball is a value between 0 and 360. For a right handed batsman 0=square of the wicket on the leg side and values are measured in an anti-clockwise direction so wicket keeper=90, point=180, bowler=270. The same co-ordinate system is used for left handers so 0=square on off side and measurements are taken anti-clockwise from there. |
|    |           | 89            | Field Magnitude | Integer   | Corresponds to the distance the ball travelled. Below are the values which can be over 180 but the boundaries are registered as described below:<br><br>170 = the boundary to each side (3 and 9 o'clock)<br><br>180 = the boundary behind the bowler (6 o'clock)<br><br>160 = the boundary behind the wicket-keeper (12 o'clock)                               |

**Table 112 – Ball Data Value Event Mappings**

#### 8.16.5 Revised Number of Overs Value Event

| ID         | EventCode       | Value Type ID | Value Type  | Data Type | Description             |
|------------|-----------------|---------------|-------------|-----------|-------------------------|
| <b>288</b> | CR_OVERS_UPDATE | 59            | Over Number | Integer   | Revised number of overs |

**Table 113 – Revised Number of Overs Value Event**

### 8.16.6 Possible Run(s) Value Event

| ID          | EventCode             | Value Type ID | Value Type | Data Type | Description             |
|-------------|-----------------------|---------------|------------|-----------|-------------------------|
| <b>1960</b> | CR_POSSIBLE_R<br>UNS1 | 90            | Runs       | Integer   | Number of possible runs |
| <b>2984</b> | CR_POSSIBLE_R<br>UNS2 |               |            |           |                         |

**Table 114 – Possible Run(s) Value Event**

### 8.16.7 Penalty Reason Value Events

| ID          | EventCode    | Value Type ID | Value Type     | Data Type | Description   |
|-------------|--------------|---------------|----------------|-----------|---|
| <b>1957</b> | CR_CPENALTY1 | 86            | Penalty reason | Integer   | 1=Slow over rate<br>2=Illegal fielding<br>3=Hit Helmet<br>4=Ball tampering<br>5=Other |
| <b>2981</b> | CR_CPENALTY2 |               |                |           |   |

**Table 115 – Penalty Reason Value Event Mappings**

### 8.16.8 Dismissal Type Value Events

| ID          | EventCode | Value Type ID | Value Type     | Data Type | Description   |
|-------------|-----------|---------------|----------------|-----------|---|
| <b>1958</b> | CR_COUT1  | 87            | Dismissal type | Integer   | 0=Not out<br>1=Bowled<br>2=Caught and bowled<br>3=Caught<br>4=Handled the ball<br>5=Hit ball twice<br>6=Hit wicket<br>7=Leg before wicket<br>8=Obstructing field<br>9=Retired hurt<br>10=Retired out<br>11=Run out<br>12=Stumped<br>13=Timed out<br>14=Caught (sub)<br>15=Run out (sub)<br>16=Absent hurt |
| <b>2982</b> | CR_COUT2  |               |                |           |   |

**Table 116 – Dismissal Type Value Event Mappings**

### 8.16.9 Formation changed event

| ID         | EventCode         | Value Type ID | Value Type                   | Data Type | Description                                   |
|------------|-------------------|---------------|------------------------------|-----------|---|
| <b>532</b> | Formation Changed | 91            | Match Formation ID Home Team | Integer   | Unique Match Formation ID Home Team           |
|            |                   | 92            | Match Formation Home Team    | String    | See chapter 8.7 <i>Formation Data Mapping</i> |

| ID | EventCode | Value Type ID | Value Type                   | Data Type | Description                                   |
|----|-----------|---------------|------------------------------|-----------|---|
|    |           | 93            | Match Formation ID Away Team | Integer   | Unique Match Formation ID Away Team           |
|    |           | 94            | Match Formation Away Team    | String    | See chapter 8.7 <i>Formation Data Mapping</i> |

**Table 117 – Formation Changed Event**

#### 8.16.10 VAR Reason Mapping

| ID         | EventCode  | Value Type ID | Value Type | Data Type | Description                                  |
|------------|------------|---------------|------------|-----------|--|
| <b>535</b> | VAR reason | 95            | VAR Reason | Integer   | -1=Unknown<br>0=Goal<br>1=Penalty<br>2=Cards |

**Table 118 – VAR Reason**

#### 8.16.11 Expected Goal Value Events

| ID          | EventCode              | Value Type ID | Value Type                             | Data Type | Description  |
|-------------|------------------------|---------------|--|-----------|--|
|             |                        | 29            | Jersey number                          | Integer   | The jersey number of the respective player.<br>Note: If no jersey information is available the parameter is missing. |
|             |                        | 33            | RB player ID                           | Long      | Unique RB player ID.<br>Note: If no player information is available, the id is set to -1.                            |
| <b>1078</b> | Expected Goal 1        | 34            | OPTA player name                       | String    | The name of the player.  |
| <b>2102</b> | Expected Goal Update 1 | 100           | Team accumulated expected goal value   | Double    | Team accumulated expected goal value.  |
| <b>1079</b> | Expected Goal 2        | 101           | Player accumulated expected goal value | Double    | Player accumulated expected goal value.  |
| <b>2103</b> | Expected Goal Update 2 | 102           | Player expected goal value             | Double    | Player expected goal value.  |
|             |                        | 103           | OPTA player ID                         | Integer   | Unique OPTA player ID.<br>Note: If no player information is available, the id is set to -1.                          |
|             |                        | 104           | OPTA event ID                          | Integer   | Unique OPTA match event ID.<br>Note: If no event information is available, the id is set to -1.                      |

| ID | EventCode | Value Type ID | Value Type      | Data Type | Description  |
|----|-----------|---------------|-----------------|-----------|--|
|    |           | 105           | Shot result     | Integer   | See chapter 8.8.4 <i>Shot Result</i>   |
|    |           | 106           | Body part       | Integer   | See chapter 8.8.1 <i>Body Part</i>   |
|    |           | 107           | Pattern of play | Integer   | See chapter 8.8.2 <i>Pattern of Play</i>   |
|    |           | 108           | Shot location   | Integer   | See chapter 8.8.3 <i>Shot Location</i>   |
|    |           | 109           | OPTA team ID    | Integer   | Unique OPTA team ID.<br>Note: If no team information is available, the id is set to - 1. |

**Table 119 – Expected Goal Value Events**

#### 8.16.12 Runner on Base Value Event

| ID         | EventCode      | Value Type ID | Value Type                  | Data Type | Description  |
|------------|----------------|---------------|-----------------------------|-----------|--|
| <b>232</b> | RUNNER_ON_BASE | 15            | TeamId                      | Long      | ID of the team the jersey data was sent for.   |
|            |                | 42            | Base_1_Player_ID            | Long      | ID of the player on Base 1 (If included in event <i>no player on Base 1</i> )            |
|            |                | 43            | Base_1_Player_Name          | String    | Player name of the player on Base 1 (If included in event <i>no player on Base 1</i> )   |
|            |                | 44            | Base_1_Player_Jersey_Number | Integer   | Jersey number of the player on Base 1 (If included in event <i>no player on Base 1</i> ) |
|            |                | 45            | Base_2_Player_ID            | Long      | ID of the player on Base 2 (If included in event <i>no player on Base 2</i> )            |
|            |                | 46            | Base_2_Player_Name          | String    | Player name of the player on Base 2 (If included in event <i>no player on Base 2</i> )   |
|            |                | 47            | Base_2_Player_Jersey_Number | Integer   | Jersey number of the player on Base 2 (If included in event <i>no player on Base 2</i> ) |
|            |                | 48            | Base_3_Player_ID            | Long      | ID of the player on Base 3 (If included in event <i>no player on Base 3</i> )            |
|            |                | 49            | Base_3_Player_Name          | String    | Player name of the player on Base 3 (If included in event <i>no player on Base 3</i> )   |
|            |                | 50            | Base_3_Player_Jersey_Number | Integer   | Jersey number of the player on Base 3 (If included in event <i>no player on Base 3</i> ) |

**Table 120 – Runner on Base Value Event**



## 8.17 Ball Position Mappings

### 8.17.1 Soccer


| Zone  | Code | Description            |
|---|------|------------------------|
|    | FK1  | Free Kick Zone 1       |
|    | FK2  | Free Kick Zone 2       |
|    | FK3L | Free Kick Zone 3 Left  |
|   | FK3R | Free Kick Zone 3 Right |
|  | FK4  | Free Kick Zone 4       |
|  | FK5  | Free Kick Zone 5       |
|  | CR_L | Corner Left            |
|  | CR_R | Corner Right           |

Table 121 – Soccer Zones

8.17.2 Ice Hockey

| Zone  | Code   | Description        |
|---|--------|--------------------|
|    | IH_Z1  | Bully Zone 1       |
|    | IH_Z2L | Bully Zone 2 Left  |
|    | IH_Z2R | Bully Zone 2 Right |
|  | IH_Z3L | Bully Zone 3 Left  |
|  | IH_Z3R | Bully Zone 3 Right |
|  | IH_Z4  | Bully Zone 4       |

Table 122 – Ice Hockey Zones

**Note:** Bully Zones 1 and 4 can be handled identically on the feed, as they both represent the centre bully.

## 8.18 Sports Ticker Data Mappings

### 8.18.1 Common Sport Ticker Data Mappings

| ID        | Short Description | Data Type | Long Description                               |
|-----------|-------------------|-----------|--|
| <b>22</b> | coverageTv        | String    | Name of the TV channel the match is covered on |
| <b>24</b> | watIsStadiumFeed  | Boolean   | Watch & Trade stadium feed is available.       |

**Table 123 – Common Sportsticker Data**

### 8.18.2 Cricket Sport Ticker Data Mappings

| ID        | Short Description | Data Type | Long Description            |
|-----------|-------------------|-----------|-----------------------------|
| <b>44</b> | Overs             | Integer   | The revised number of overs |

**Table 124 – Common Sportsticker Data**

# 9 Appendix

Support will be provided by RunningBall Live Support (**email:** [support@rball.com](mailto:support@rball.com))

Incidents will be handled by RunningBall Live Support (**email:** [support@rball.com](mailto:support@rball.com))

Technical integration questions will be handled by **email:** [feed@rball.com](mailto:feed@rball.com)

**Note:** Please make sure that you always report live incidents via [support@rball.com](mailto:support@rball.com)!  
The email address [feed@rball.com](mailto:feed@rball.com) is only for integration support purposes and a response should only be expected during regular business hours.

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