



FIBA

We Are Basketball

FIBA Livestats Interface Description v 1.28

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Introduction

This document describes the interface data format for Live data about FIBA basketball games: score, time and actions “scouted” in the arena(s) by an On-Venue Result (OVR) system are sent as they happen to the FIBA Live Stats systems and made available to FIBA information Systems during & post game.

This data is then for example used for live data feeds on FIBA.basketball and FIBA Mobile applications.

The OVR system used in the arena can be a SwissTiming system or any other software from a third-party (for example the FIBA Live Stat – FLS - software) capable of delivering the data in the format of the interface described in this document.

General transmission directives

The FIBA OVR Livestats interface uses the JSON format to exchange data. There are 3 different contents, all in JSON format, to exchange different kind of information:

1. **GAME COMPETITORS** file
This file must be sent as first file, before the game actually starts and in any case before sending any other GAME or PERIOD ACTIONS file; updates can be sent afterwards but this file must be sent first to “initiate” the game; it is only necessary to send this file when something in its content is updated; the GAME COMPETITORS file contains general information about the participants to the game: teams, players and officials details
2. **GAME** file
The GAME file contains general information about the game itself: name of the event, location, current period/time, current score, current box score, etc; this file must be resent in full each time there is an update in its content
3. **PERIOD ACTIONS** file
The PERIOD ACTIONS file contains detailed information about each action of the game; an action of the game always implies a change to the GAME file, but the GAME file is an “aggregated” view of the game (totals) whereas the PERIOD ACTIONS file is a “detailed” view of the game (line/action items)

All JSON content are encoded in UTF-8.

A combination of all files is also available in JSON format and is named “Game File”

- The GAME COMPETITORS content
- The GAME content
- 1 PERIOD ACTIONS content for each period of the game (at least 4 periods at the end of the game)

For each property, it is mentioned if

- The property is mandatory or not: if it is mandatory, it will always be provided for the object, otherwise it might be omitted.
- The Value is mandatory or not: if it is mandatory, it means that there will always have a value for this property. Otherwise, it could be set as blank or null.

Mandatory		
Field	Value	Behavior
Yes	Yes	The property and its value will always be present in the object
Yes	No	The property will always be present in the object but its value can be null or blank

No	No	The property might be omitted in the object but it can also be provided with a blank or null value.
----	----	---

File Content & Live Stat Providers

FIBA is having different live stat data provider used on different competition

- FIBA Live Stats from Genius Sports
- On-Venue Result (OVR) from SwissTiming

Each provider might provide the data described in the document differently.

It is important to consider both interface implementation content when implementing Live Stat Data from GDAP into your system.

```

CompDetails:
  Competitors:
    BKBMTEAMS-----GPA-001000---22: 1
      Order: 1
      Games: {}
      Id: "BKBMTEAMS-----GPA-001000---22"
      AthleteId: "22"
      OvrCode: "22"
      Nationality: "BEL"
      Name: "BELGIUM"
      IsTeam: true
      Height: "199"
      Age: "29.0"
    BKBMTEAMS-----GPA-001000---152: {}
    BKBMTEAMS-----GPA-001000---182598: 2
      Order: 1
      ParentId: "BKBMTEAMS-----GPA-001000---22"
      Bib: "4"
      Starter: true
      Position: "PG"
      Games: {}
      Id: "BKBMTEAMS-----GPA-001000---182598"
      AthleteId: "182598"
      OvrCode: "182598"
      Nationality: "BEL"
      Name: "LECOMTE"
      FirstName: "Emmanuel"
      FirstNameShort: "E."
      Height: "180"
      HeightFt: "5'11\""
      Age: "27"
      Club: "C-Bet Jonava (LTU)"
    BKBMTEAMS-----GPA-001000---158291: {}
    BKBMTEAMS-----GPA-001000---152161: {}
    BKBMTEAMS-----GPA-001000---168205: {}
    BKBMTEAMS-----GPA-001000---142858: {}
    BKBMTEAMS-----GPA-001000---188639: {}
    BKBMTEAMS-----GPA-001000---189807: {}
    BKBMTEAMS-----GPA-001000---163724: {}
    BKBMTEAMS-----GPA-001000---203257: {}
    BKBMTEAMS-----GPA-001000---227065: {}
  
```

SwissTiming OVR file sample

```

CompDetails:
  Officials: {}
  Competitors:
    T_86: 1
      FibId: "86"
      Id: "T_86"
      IsTeam: true
      Name: "Jordan"
      Nationality: "JOR"
      AthleteId: ""
    T_74: {}
    P_322147: 2
      FibId: "P_322147"
      Bib: "00"
      Age: 18
      AthleteId: ""
      Captain: false
      ParentId: "T_86"
      Position: "PG"
      Id: "P_322147"
      IsTeam: false
      Nationality: "JOR"
      Name: "Al-Majali"
      FirstName: "Nour"
      Height: 155
      Edited: 1
    P_316217: {}
    P_316075: {}
    P_316291: {}
    P_316077: {}
  
```

GeniusSport OVR file sample

GAME COMPETITORS file

General use

The GAME COMPETITORS file is the reference for all JSON objects. It contains the definition and detailed properties of all the objects used in other files. Other files (GAME and PERIOD ACTION files) only include the IDs referring to these objects to keep the traffic as low as possible. This leads to some special handling of this file.

When is it available or updated?

Before the game starts, we expect to get the GAME COMPETITORS file from Livestats system to make it available. **In every case the GAME COMPETITORS JSON file will be available before the GAME file is available for the first time.** In case of changes, the GAME COMPETITORS file will be updated, which can be done at any time.

Content

```
{
  "Competitors":{ ... },
  "Officials":{ ... }
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Competitors	Object	Yes	Yes	Dictionary of competitor detail objects defined here
Officials	Object	Yes	Yes	Dictionary of official objects defined here

Competitors

As we use this object as dictionary, we expect “player detail objects” as well as “team detail objects” in the same dictionary.

Team details object

```
{
  "T_658":{
    "Id": "T_658",
    "AthleteId": "9e5ce406-d5f1-4cb6-8b23-5ce64548d661",
    "Fibald": "658",
    "Name": "Greece",
    "Nationality": "GRE",
    "IsTeam": true
  }
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	

Id	String	Yes	Yes	Free text identifier provided by the Live Stat software. Depending on the Live Stat Provider, it can be provided based on FIBA ID with prefix T_{FIBA team id}
Athletelid	String	No		Third party unique ID of the team (mandatory for FIBA Europe for example)
Fibald	String	Yes	Yes	ID from the FIBA Competition System (use the FIBA Organisation ID of the team)
Name	String	Yes	Yes	Name of the Team
Nationality	String	Yes	No	Short Code of the Nation (IOC code) or FIBA Code See the following for more explanation: http://en.wikipedia.org/wiki/List_of_IOC_country_codes
IsTeam	String	Yes	Yes	Is set to true

Player details object

```

{
  //example player
  "P_60058":{
    "Id": "P_60058",
    "Athletelid": "ca43268d-a2a6-4c62-b128-39a05aada022",
    "Fibald": "60058",
    "ParentId": "T_658",
    "Name": "VASILEIADIS",
    "FirstName": "Konstantinos",
    "Nationality": "GRE",
    "IsTeam": false,
    "Age": 29,
    "Height": 190,
    "Club": "Ironi Ashkelon",
    "Bib": 4,
    "Captain": true,
    "Position": "SG"
    "Edited": false
  },

  //example player, edited in the FLS
  "P_60058":{
    "Id": "P_60058",
    "Athletelid": "ca43268d-a2a6-4c62-b128-39a05aada022",
    "Fibald": "60058",
    "ParentId": "T_658",
    "Name": "VASILEIADIS",
    "FirstName": "Sokrates",
    "Nationality": "GRE",
    "IsTeam": false,
    "Age": 29,
    "Height": 190,
    "Club": "Ironi Ashkelon",
    "Bib": 4,
    "Captain": true,
    "Position": "SG"
    "Edited": true
  },

  //example player added by the FLS (without a known FIBAID)

```



```

"Px_-1":{
  "Id": "Px_-1",
  "AthleteId": "",
  "FibaId": "Px_-1",
  "ParentId": "T_658",
  "Name": "VASILEIADIS",
  "FirstName": "Konstantinos",
  "Nationality": "GRE",
  "IsTeam": false,
  "Age": 29,
  "Height": 190,
  "Club": "Ironi Ashkelon",
  "Bib": 4,
  "Captain": true,
  "Position": "SG"
  "Edited": true
},
...
}

```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	SxString	Yes	Yes	Free text identifier provided by the Live Stat software. it can be provided based on FIBA ID with prefix with prefix P_{FIBA player/person id} For Genius Sport OVR system: In case the statisticians has added a new player, where the Player FIBA Id is not available, the player is identified by Px_{incremental number} for example Px_-1
AthleteId	String	No		Third party unique ID of the player (mandatory for FIBA Europe for example)
FibaId	String	Yes	Yes	Player/Person ID from the FIBA Competition System (use the FIBA id of the team)
ParentId	String	No	No	The Team Identifier (Id) for the player. Depending on the Live Stat Provider, it can be provided based on FIBA ID with prefix T_{FIBA team id}
Name	String	Yes	Yes	Name of the player
FirstName	String	No		First name of the player
Nationality	String	Yes	No	IOC Short code / FIBA Code of the nationality
IsTeam	Boolean	Yes	Yes	Always False for a player
Age	Number	No		Age of the player in years
Height	Number	No		Height of the player in centimeter
Club	String	No		Name of the Club the player belongs to
Bib	String (length 2)	Yes	Yes	Shirt number of the player (2 positions string to allow any shirt number: 0, 00, 1-99; number will be displayed in outputs as delivered in this interface)
Captain	Boolean	No		Is true if the player is captain of the team (only one captain per team/game)
Position	String	Yes	No	Is the short code of the position of the player C → Center PF → Power forward SF → Small forward SG → Shooting guard

				PG → Point guard
Edited	Boolean	No	false	<p>Is true in case the player was edited in the FLS system (edited for example name/details (but using an existing (Player FIBA id))</p> <p>Is true in case the player was created in the FLS system</p> <p>Is false in case the player was not edited in the FLS system</p>

Games and teams officials (Official object)

This object is used to give information about team officials (i.e.: coaches) as well as game officials (commissioner, umpire, referees).

```
{
  //example referee
  "O_723849":{
    "Id": "O_723849",
    "ParentId": "0",
    "Name": "BULTO",
    "FirstName": "Vicente",
    "Nationality": "ESP",
    "Function": "Referee",
    "Position": "1"
    "Edited": false
  },

  //example referee added by the FLS (without a known FIBAIID)
  "Ox_-1":{
    "Id": "Ox_-1",
    "ParentId": "0",
    "Name": "BULTO",
    "FirstName": "Vicente",
    "Nationality": "ESP",
    "Function": "Referee",
    "Position": "1"
    "Edited": true
  },

  //example team official
  "O_9999":{
    "Id": "O_9999",
    "ParentId": "T_122",
    "Name": "BULTO",
    "FirstName": "Vicente",
    "Nationality": "ESP",
    "Function": "Coach",
    "Position": "1"
    "Edited": false
  }
}

//example team official edited in the FLS
```

```

"O_9999":{
  "Id": "O_9999",
  "ParentId": "T_122",
  "Name": "SANC",
  "FirstName": "Vicente",
  "Nationality": "ESP",
  "Function": "Coach",
  "Position": "1"
  "Edited": true
}

```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Free text identifier provided by the Live Stat software. it can be provided based on FIBA ID with prefix with prefix O_{FIBA official id} For Genius Sport OVR system: In case the statisticians has added a new game official, where the Player FIBA Id is not available, the game official is identified by Ox_{incremental number} for example Ox_-1
ParentId	String	No	No	The Team Identifier (Id) for the game official. Depending on the Live Stat Provider, it can be provided based on FIBA ID with prefix T_{FIBA team id} Value is "0" for non-team officials(e.g. referees)
Name	String	Yes	Yes	Name of official
FirstName	String	Yes	No	First name of official
Nationality	String	Yes	No	Nationality of official (IOC code)
Function	String	Yes	Yes	Function of official: listed here
Position	String	Yes	No	Position of official (if more than one with the same function)
Edited	Boolean	No	false	Is true in case the official was edited in the FLS system (edited for example name/details (but using an existing (FIBA id for Team/Game Official)) Is true in case the official was created in the FLS system Is false in case the official was not edited by the FLS system

Name of function	Description
Commissioner	Event - / FIBA –Official
Referee	Event - / FIBA –Official
Umpire	Event - / FIBA –Official
Coach	Team Official
Assistant coach	Team Official

Statisticians

This object is used to give information about statisticians.

```
{
  "S_405191":{
    "Id": "S_405191",
    "Name": "Verbickas",
    "FirstName": "Justinas",
    "Nationality": "",
    "Function": "Statistician",
    "Type": "OPERATOR",
    "LicenseNumber": 0,
    "Edited": false
  },
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Free text identifier provided by the Live Stat software. Depending on the Live Stat Provider, it can be delivered Id of the statistician with prefix "S_{id}"
Name	String	Yes	Yes	Name of statistician
FirstName	String	Yes	No	First name of statistician
Nationality	String	Yes	No	Nationality of statistician (IOC code)
Function	String	Yes	Yes	Function of the statistician
Type	String	Yes	No	Type of the statistician
LicenseNumber	Integer	Yes	Yes	License number of the statistician
Edited	Boolean	No	false	Is true in case the statistician was edited in the FLS system

Game FILE

General use

The GAME file contains general information about the game itself (location, current time/period, current score, current box score, etc).

When is it available or updated?

The file is made available or updated in full whenever something changes in its content.

For example:

If there was a personal foul, we expect the GAME and the PERIOD ACTIONS files (of the current period) to be updated; the updates will be available when all relevant calculations to the statistics have been made.

Content

```
{
  "Rsc": { ... },
  "FederationCodes": { ... },
  "EventName": "FIBA Championship",
  "PhaseName": "Preliminary Round",
  "UnitName": "Game 2",
  "StartTime": 1341228600000,
  "Location": "LOC1",
  "Site": "Olympic Park Basketball Arena",
  "Status": "1",
  "RC": "00:00",
  "CurrentPeriod": "Q1",
  "CurrentPeriodStatus": "E",
  "Officials": [ ... ],
  "Competitors": [ ... ],
  "ScoreList": [ ... ],
  "Stats": { ... }
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Rsc	Object	Yes	Yes	Defined here
FederationCodes	Object	Yes	Yes	Delivered by MAP/FLS interface
EventName	String	Yes	No	Name of Event
PhaseName	String	Yes	Yes	Name of Phase - Delivered by MAP/FLS interface
UnitName	String	Yes	No	Name of Game (empty string if not known)
StartTime	Number	Yes	Yes	Timestamp in milliseconds (UTC Milliseconds since 01.01.1970)
Location	String	Yes	Yes	Delivered by MAP/FLS interface
Site	String	Yes	No	Name of Arena
Status	String	Yes	Yes	List of possible Values: here
RC	String	Yes	Yes	Time of current Period - Is updated whenever the feed is send. - Runs down;

				<ul style="list-style-type: none"> - Starts with "10:00"; Is "10:00" before the game; - Is "00:00" in Breaks, Halftime and after the game
CurrentPeriod	String	Yes	Yes	Q1; Q2; Q3; Q4; OT1; OT2; ... OT9 Current Period changes when the period ends.
CurrentPeriodStatus	String	Yes	Yes	List of possible values: here
Officials	Array	Yes	No	List of Officials (empty if not known)
Competitors	Array	Yes	Yes	List of team objects (first item is home team, second item is visiting team)
ScoreList	Array	Yes	Yes	List of period objects; empty if game not started, not played periods are not in this list, as soon as a period is started the period must be added to this list
Stats	Object	Yes	Yes	Object with the game related statistics. Defined here .

RSC

```
{
  "Discipline": "BK",
  "Gender": "M",
  "Event": "6595",
  "Phase": "B",
  "Unit": "2",
  "LongEvent": "BK-M-6595",
  "Value": "9644-B-2"
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Discipline	String	Yes	No	BK for basketball, if not known empty
Gender	String	Yes	No	M (men) or W (women), if not known empty
Event	String	Yes	Yes	Event-Id, if not known empty; delivered by the MAP/FLS interface
Phase	String	Yes	Yes	Group/Pairing Code, if not known empty; delivered by the MAP/FLS interface
Unit	String	Yes	Yes	Game Number, if not known empty; delivered by the MAP/FLS interface
LongEvent	String	Yes	Yes	{Discipline}-{Gender}-{EventId}
Value	String	Yes		{ FederationCodes.RoundId }-{ FederationCodes.GroupId }- { FederationCodes.GameId }

FederationCodes

```
{
  "EventId": "6595",
  "RoundId": "9644",
  "GroupId": "B",
  "GameId": "2",
}
```

Description

Property	Type	Mandatory (field+value)	Description
EventId	String	Yes	Delivered by MAP/FLS interface
RoundId	String	Yes	Delivered by MAP/FLS interface
GroupId	String	Yes	Delivered by MAP/FLS interface

GameId	String	Yes	Delivered by MAP/FLS interface
--------	--------	-----	--------------------------------

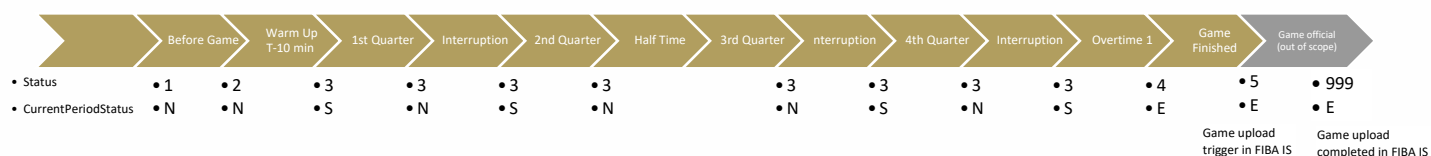
Status Values

The Status provided by the OVR Live Stats interface corresponds to the Live Game Status. It is only relevant if the game is Live.

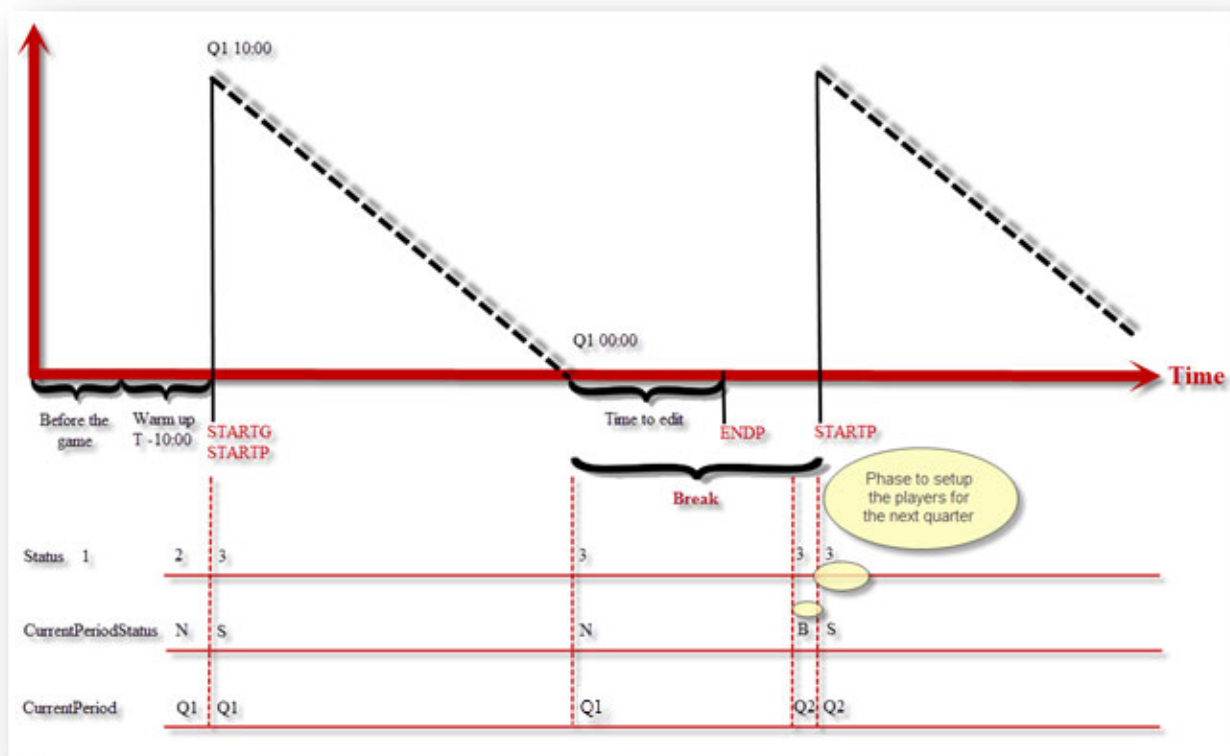
Description	Expected Value	Value provided by some LS providers
Planned	0	Event-1-
Scheduled	1	Event-2-
Starting (10 minutes before the game starts)	2	Event-50-
Running	3	Event-4-
Unofficial	4	Event-6-
Finished	5	Event-7-
Delayed	6	Event-9-
Cancelled	7	Event-11-
Protested	8	Event-12-
Rescheduled	9	Event-14-
Interrupted	10	Event-15-
Validated	999	Event-999-

CurrentPeriodStatus Values

Description	Value
before the start of a new period	N
before the action "STARTP" to setup the player in the new period	B
period is started (after the action "STARTG")	S
game is over (after the action "ENDG")	E



Graphic 1: Status / CurrentPeriodStatus changes in a game



Graphic 2: Status / CurrentPeriodStatus / CurrentPeriod changes around the first quarter

Officials

```
[
  {
    "Id": "O_324235"
  },
  { ... }
]
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Delivered by MAP/FLS interface (use the FIBA id of the official) with prefix O_{FIBA official id}

Competitors

```
[
  {
    "Id": "T_288",
    "Score": "107",
    "Officials": [ ... ],
  }
]
```



```

    "Periods": [ ... ],
    "Stats": { ... },
    "Children": [ ... ]
  },
  { ... }
]

```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Delivered by MAP/FLS interface (FIBA team id) with prefix "T" for Teams Examples: T_{FIBA team id} T_288
Score	Number	Yes	Yes	Current Score of the team in this game
Officials	Array	Yes	No	List of Team officials
Periods	Array	Yes	Yes	List of period objects; empty if game not started, not played periods are not in this list, as soon as a period is started the period must be added to this list
Stats	Object	Yes	Yes	Object of team statistics
Children	Array	Yes	Yes	List Children (Player Objects)

Competitors → Officials

```

[
  {
    "Id": "O_344432"
  },
  { ... }
]

```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	No	Team officials like coach and assistant coaches; Delivered by MAP/FLS interface (FIBA official id) with prefix "O" for Officials Examples: O_{FIBA official id} O_344432

Competitors → Periods

```

[
  {
    "Id": "Q1",
    "HalfTimeScore": "15",
    "Score": "32"
  },
  {
    "Id": "OT1",
    "HalfTimeScore": "82",
    "Score": "107"
  }
]

```

```

    },
    {...}
  ]

```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Q1; Q2; Q3; Q4; OT1; OT2; ... OT9
HalfTimeScore	String	Yes	No	Score of the team in the half time of this period (after 5 min)
Score	String	Yes	Yes	Score of the team in this period

Competitors → Stats (Team cumulated)

```

{
  "AS": 31,
  "BS": 3,
  "DR": 39,
  "OR": 12,
  "REB": 51,
  "FD": 23,
  "FG2A": 38,
  "FG2M": 29,
  "FG2P": 76.4,
  "FG3A": 24,
  "FG3M": 10,
  "FG3P": 42.3,
  "FGA": 62,
  "FGM": 39,
  "FGP": 63.6,
  "FTA": 27,
  "FTM": 19,
  "FTP": 70.6,
  "FGIA": 6,
  "FGIM": 6,
  "FGIP": 100.00,
  "PF": 18,
  "PTS": 107,
  "ST": 5,
  "TO": 16,
  "A_BL": 5,
  "A_BLS": "43-26",
  "A_BR": 8,
  "A_BRS": "41-21",
  "T_OR": 8,
  "T_DR": 8,
  "T_REB": 8,
  "T_PF": 8,
  "T_TO": 8,
  "A_PAT": 8,
  "A_PIP": 8,
  "A_SCP": 8,
  "A_FBP": 8,
  "T_PFB": 7,
  "A_TOD": 5,
  "A_TOT": 3,

```

```
"T_TL": "45:12",
"A_FOUL" : 2,
"A_ACT": 23
}
```

Description

Property	Type	Mandatory	Description
AS	Number	No	Assists
BS	Number	No	Blocked shots
DR	Number	No	Defensive Rebounds
OR	Number	No	Offensive Rebounds
REB	Number	No	Totals Rebounds (DR + OR)
FD	Number	No	Fouls drawn
FG2A	Number	No	2 Pointer attempts
FG2M	Number	No	2 Pointer success
FG2P	Number	No	2 Pointer success in percentage rate
FG3A	Number	No	3 Pointer attempts
FG3M	Number	No	3 Pointer success
FG3P	Number	No	3 Pointer success in percentage rate
FGA	Number	No	Field goal attempts (FG2A + FG3A)
FGM	Number	No	Field goal success (FG2M + FG3M)
FGP	Number	No	Field goal success in percentage rate
FTA	Number	No	Free throws attempts
FTM	Number	No	Free throws success
FTP	Number	No	Free throws success in percentage rate
FGIA	Number	No	Points In The Paint Attempted
FGIM	Number	No	Points In The Paint Made
FGIP	Number	No	Points In The Paint Percentage
PF	Number	No	Personal fouls
PTS	Number	No	Points of Team in game
ST	Number	No	Steals
TO	Number	No	Turnovers
A_BL	Number	No	Biggest lead format: 11
A_BLS	String	No	Biggest lead Score 43-26
A_BR	Number	No	Biggest run; format: 11 (-0 has to be inserted by FE)
A_BRS	String	No	Biggest run score; format: 41-21
T_OR	Number	No	Team offensive rebounds
T_DR	Number	No	Team defensive rebounds
T_REB	Number	No	Team rebounds (T_OR + T_DR)
T_PF	Number	No	Coach fouls
T_TO	Number	No	Team turnovers
A_PAT	Number	No	Team points after turn over
A_PIP	Number	No	Team points in the paint
A_SCP	Number	No	Team 2 nd chance points
A_FBP	Number	No	Team fast break points
T_PFB	Number	No	Team points from the bench
A_TOD	Number	No	Time outs defined (total number)
A_TOT	Number	No	Time outs taken (sum of all taken timeouts)
T_TL	String	No	Team time leading (31:30)
A_FOUL	Number	No	Team fouls in current period
A_ACT	Number	No	Activity indicator

Competitors → Children (Player item)

```
[
  {
    "Id": "P_234234",
    "Stats": { ... }
  },
  { ... }
]
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Id	String	Yes	Yes	Id of the Player as described in page
<u>Stats</u>	String	Yes	Yes	Statistic object of the player

Competitors → Children → Stats

```
{
  "CB": true,
  "AS": 2,
  "BS": 0,
  "BSR": 1,
  "DR": 5,
  "OR": 1,
  "REB": 6,
  "FD": 2,
  "FG2A": 0,
  "FG2M": 0,
  "FG2P": 0,
  "FG3A": 10,
  "FG3M": 1,
  "FG3P": 10,
  "FGA": 10,
  "FGM": 1,
  "FGP": 10,
  "FTA": 2,
  "FTM": 2,
  "FTP": 100,
  "FGIA": 6,
  "FGIM": 6,
  "FGIP": 100.00,
  "PF": 2,
  "PTS": 5,
  "ST": 1,
  "TO": 1,
  "TP": "18:10",
  "PM": 5,
  "EFF": 54,
  "Starter": true,
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
CB	Boolean	Yes	Yes	True if player is on court, false if player is on bench
AS	Number	No		Assists
BS	Number	No		Blocked shots
BSR	Number	No		Blocked shots received
DR	Number	No		Defensive Rebounds
OR	Number	No		Offensive Rebounds
REB	Number	No		Totals Rebounds (DR + OR)
FD	Number	No		Fouls drawn
FG2A	Number	No		2 Pointer attempts
FG2M	Number	No		2 Pointer success
FG2P	Number	No		2 Pointer success in percentage rate
FG3A	Number	No		3 Pointer attempts
FG3M	Number	No		3 Pointer success
FG3P	Number	No		3 Pointer success in percentage rate
FGA	Number	No		Field goal attempts (FG2A + FG3A)
FGM	Number	No		Field goal success (FG2M + FG3M)
FGP	Number	No		Field goal success in percentage rate
FTA	Number	No		Free throws attempts
FTM	Number	No		Free throws success
FTP	Number	No		Free throws success in percentage rate
FGIA	Number	No		Points In The Paint Attempted
FGIM	Number	No		Points In The Paint Made
FGIP	Number	No		Points In The Paint Percentage
PF	Number	No		Personal fouls
PTS	Number	No		Points of Player in game
ST	Number	No		Steals
TO	Number	No		Turnovers
TP	String	No		Sum of minutes and seconds the player is/was in game ; Format: "mm:ss"
PM	Number	No		+/- of player The difference of the score while this player had been on the field.
EFF	Number	No		Efficiency value (Calculated in OVR; can be left empty)
Starter	Boolean	Yes	Yes	Is true if the player belongs to the starting five

ScoreList

```
[
  {
    "Period": "Q1",
    "Items": [ ... ]
  },
  { ... }
]
```

Description

Property	Type	Mandatory		Description
		Field	Value	

Period	String	Yes	Yes	Q1; Q2; Q3; Q4; OT1; OT2; ... OT9
Items	Array	Yes	Yes	List of score items

ScoreList → Items

```
[
  {
    "Time": "9:08",
    "SA": 1,
    "SB": 0,
    "AC": "FG",
    "Team": "T_234234",
    "C1": "P_234234",
    "C2": "P_567567" //Assist
  },
  { ... }
]
```

Description

Property	Type	Mandatory		Description
		Field	Value	
Time	String	Yes	Yes	Time when the score was made. If the score was made after 1 minute and 10 seconds after start of period it is "8:50"
SA	Number	Yes	Yes	Score of team A (home)
SB	Number	Yes	Yes	Score of team B (visiting team)
AC	String	Yes	Yes	Action code defined here
Team	String	Yes	Yes	Delivered by MAP/FLS interface (use the FIBA id of the team) with prefix T_{FIBA team id}
C1	String	Yes	Yes	Id of the player that made the score Delivered by MAP/FLS interface (use the FIBA id of the player) with prefix P_{FIBA player id}
C2	String	No		Id of the player that assists C1 Delivered by MAP/FLS interface (use the FIBA id of the player) with prefix P_{FIBA player id}

Stats

```
{
  "DUR": "01:15",
  "A_LC": 25,
  "A_TT": 10,
  "SPECT": 6865,
}
```

Description

Property	Type	Mandatory		Description
		Field	Value	
DUR	String	Yes	No	Duration time (Format: hh:mm) of the complete game.

A_LC	Number	No		Lead changes
A_TT	Number	No		Times tied
SPECT	Number	No		Count of Spectators (empty if not know)

PERIOD ACTIONS file

General use

The PERIOD ACTIONS file contains detailed information about each action of the period; an action of the game always implies a change to the GAME; the GAME file is an “aggregated” view of the game (totals of all line items) whereas the PERIOD ACTIONS files are a “detailed” view of the game (line items).

When is it available or updated?

Whenever an action is new, updated or removed, the full list of actions of the period the action belongs will be made available or updated.

Content

```
{
  "Period": "Q1",
  "Items": [ ... ]
}
```

Description

Property	Type	mandatory		Description
		Field	Value	
Period	String	Yes	Yes	Q1; Q2; Q3; Q4; OT1; OT2; ... OT9
Items	Array	Yes	Yes	List of action items

ActionList → Items

```
[
  {
    "AC": "START",
    "Action": "Start of period",
    "Id": "45000012",
    "Time": "10:00"
  },
  { ... },
  {
    "AC": "P3",
    "Action": "P4, 09:24, Chile, 7, S. HERRERA, 3pt shot, missed",
    "C1": "P_98734",
    "C2": "",
    "Id": "45075947",
    "Pid": "",
    "SA": 47,
    "SB": 47,
    "SP": 131,
    "SPS": 0,
    "ST": 131,
    "STQ": 131,
    "STQS": 0,
    "STS": 0,
    "SU": "-",
  }
]
```



```

"SY": "116",
"T1": "T_261",
"Time": "09:24",
"GT" : 151522688,
"SC" : 15,
"Z1": "LL",
"Z2": "",
"Z3": "JS"

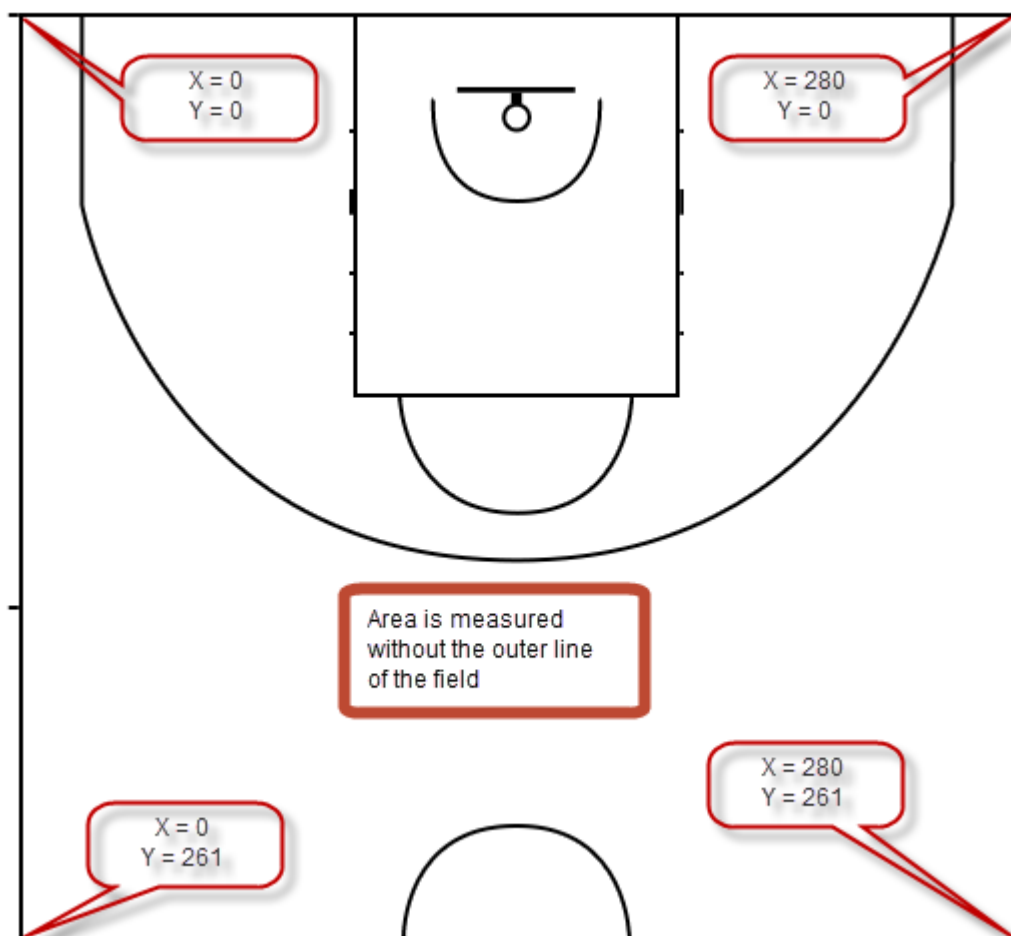
```

]

Description

Property	Type	Mandatory		Description
		Field	Value	
Time	String	Yes	Yes	Time when the action was made. If the action was made after 1 minute and 10 seconds after start of period it is "8:50"
GT	Number	Yes	Yes	Global time when the action is made. This is a timestamp related to the time zone where the game is playing in milliseconds.
SC	Number	Yes	No	Time of the shot clock. Can be between 24 and 1.
SA	Number	Yes	No	Score team A (home team), empty if no score change
SB	Number	Yes	No	Score team B (away team), empty if no score change
<u>AC</u>	String	Yes	Yes	Defined here
Action	String	No		String for the description of the action <i>Note: this attribute is not provided by all OVR systems</i>
SU	String	No		For all scoring action "+" successful "-" unsuccessful; not sure but I understand this is also used for won/lost jumpball; in my opinion this should also be used for blocks made and received
<u>Z1</u>	String	No		Defined here , empty if not used
<u>Z2</u>	String	No		Defined here , empty if not used
<u>Z3</u>	String	No		Defined here , empty if not used
T1	String	No		Id of the team that causes the action Delivered by MAP/FLS interface (use the FIBA id of the team) with prefix T_{FIBA team id}, empty if not used
C1	String	No		Id of the Player that causes the action Delivered by MAP/FLS interface (use the FIBA id of the player) with prefix P_{FIBA player id}, empty if not used
C2	String	No		Id of the second Player that causes the action Delivered by MAP/FLS interface (use the FIBA id of the player) with prefix P_{FIBA player id}
SX	String	No		Coordinate (X) of the action (shots) see graphic below.
SY	String	No		Coordinate (Y) of the action (shots) see graphic below.
Id	String	Yes	Yes	Unique id of the action
PId	String	No		Id of another action, if the action is caused by another action, or this action has a dependency with another action
SP	Number	No		(Player) Cumulated sum of this type (without subtype) of action (at time of action in game) → (Pts, Reb, Bl, St, Tou, RF, Fouls ...) Example: 3 rd individual foul of this player at this moment of the game
ST	Number	No		(Team) Sum of this type (without subtype) of action (at time of action in game)

				→ (Pts, Reb, Bl, St, Tou, RF, Fouls ...) Example: 13 th team foul of this team in this game
STQ	Number	No		(Team) Sum of this type (without subtype) of action (in current period) → (Pts, Reb, Bl, St, Tou, RF, Fouls ...) Example: 6 th team foul of this team in this period
SPS	Number	No		(Player) Sum of this type (with subtype) of action (at time of action in game) → ("Plain" 2 Pointers, 3 Pointers, Dunks, Alley Oops, Jump Shots, Layups, Tip Ins, offensive Fouls, defensive Fouls, offensive Rebounds, defensive Rebounds, Turnovers Second Violations (to be discussed: all Second Violations in one?), Turnovers Bad Pass or ...)
STS	Number	No		(Team) Sum of this type (with subtype) of action (at time of action in game) → ("Plain" 2 Pointers, 3 Pointers, Dunks, Alley Oops, Jump Shots, Layups, Tip Ins, offensive Fouls, defensive Fouls, offensive Rebounds, defensive Rebounds, Turnovers Second Violations (to be discussed: all Second Violations in one?), Turnovers Bad Pass or ...)
STQS	Number	No		(Team) Sum of this type (with subtype) of action (in current period) → ("Plain" 2 Pointers, 3 Pointers, Dunks, Alley Oops, Jump Shots, Layups, Tip Ins, offensive Fouls, defensive Fouls, offensive Rebounds, defensive Rebounds, Turnovers Second Violations (to be discussed: all Second Violations in one?), Turnovers Bad Pass or ...)



Graphic 3: Coordinates for the fields in px

AC

* Always include default mandatory values: Time, AC and Id

**Stats: Statistic Values (SX, SY, SP, ST, STQ, SPS, STS, STQS) if available

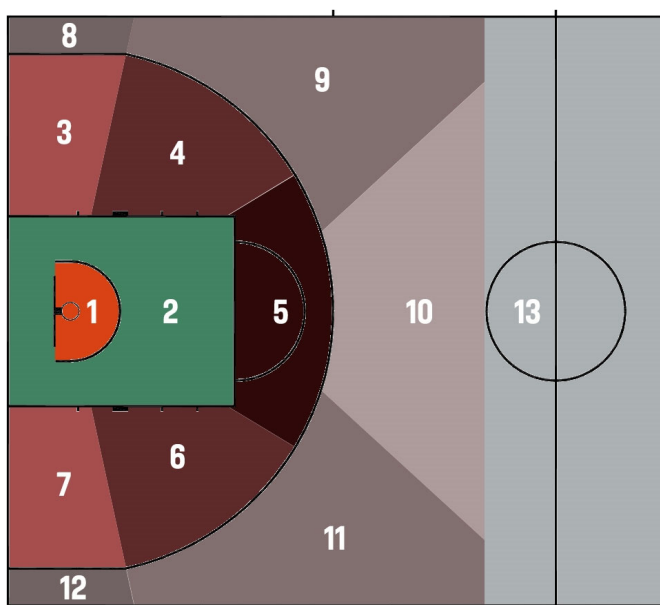
Z1/Z2/Z3

AC	Description	Mandatory fields and values for action*	Optional fields for action
STARTG	Start of the game		
STARTP	Start of the Period		
JB	Jump ball	C1,T1,SU (a jump ball always result in 2 different actions, one for won and one for lost jump ball)	
JS	Held ball situation (jump ball situation)	T1	
P2	2 Pointer	C1, T1, SU→if {SU+} then SA, SB	Z1,Z2,Z3, Stats**
P3	3 Pointer	C1, T1, SU→if {SU+} then SA, SB	Z1,Z2,Z3, Stats**
ASS	Assist	C1,T1	Stats**
BS	Block	C1, T1, SU (C1 and T1 for sure, SU to differentiate between blocks made and received)	Stats**
FT	Free throw	C1, T1, SU→if {SU+} then SA,SB	Z1,Z2,Z3, Stats**
TO	Turn over	C1,T1	Z1, Stats**
TTO	Team turn over	T1	Z1, Stats**
ST	Steal	C1,T1	Stats**
REB	Rebound	C1,T1	Z1, Stats**
TREB	Team rebound	T1	Z1, Stats**
FOUL	Foul	C1,T1	Z1, Z2, Z3 Stats**
RFOUL	Received foul (Foul Drawn)	C1,T1	Stats**
CFOUL	Technical foul coach	T1	Z1, Stats**
SUBST	Substitution in game	Combined Action: T1, C1 (in) , C2 (out); Separated Actions: T1, C1 (in = SU+ as first action) T1, C1 (out = SU – as second action)	Stats**
TIMO	Timeout	T1→ if team-time-out	Stats**
VTR	Head-Coach Challenge	T1, SU	Z1
ENDP	End of the period		
ENDG	End of the game		

Z1/Z2/Z3 are attributes specific to the action type.

P2/P3 (Z1)

Z1	Description
PUB	Under the basket (1)
P	In the paint (2)
C	Outside center (10)
LL	Outside left (11)
LW	Outside left wing (12)
RL	Outside right (9)
RW	Outside right wing (8)
IL	Inside left (6)
ILW	Inside left wing (7)
IR	Inside right (4)
IRW	Inside right wing (3)
IC	Inside center (5)
BC	Back court (13)



Note: This attribute is not provided by all OVR systems

P2/P3 (Z2)

Z2	Description
SC	2 nd chance points
FB	Fastbreak points
TO	Points after turnover
SF	Points from second chance + fastbreak
ST	Points from second chance + after turnover
AL	Points from second chance + fastbreak + after turnover
FT	Points from fastbreak + after turnover

P2/P3 (Z3)

Z3	Description
JS	Jump shot
LU	Layup
TI	Tip-in
DU	Dunk
AO	Alley Oop
TJ	Turnaround Jump Shot
FL	Floating Jump Shot
FA	Fadeaway Jump Shot
SJ	Step Back Jump Shot
PJ	Pullup Jump Shot
HS	Hook Shot
DL	Driving Layup
PD	Putback Dunk

FT (Z1)

Z1	Description
1	1 st free throw
2	2 nd free throw
3	3 rd free throw

FT (Z2)

Z2	Description
1	Of 1 free throw
2	Of 2 free throws
3	Of 3 free throws

FT (Z3)

Z3	Description
SC	2 nd chance points
FB	Fastbreak points
TO	Points after turnover
SF	Points from second chance + fastbreak
ST	Points from second chance + after turnover
AL	Points from second chance + fastbreak + after turnover
FT	Points from fastbreak + after turnover

TO (Z1)

Z1	Description
LB	Ball handling
OB	Out of bounds violation
3	three second violation
5	five-second violation
VI	Back court violation
TR	Travelling violation
BP	Bad pass
OGT	Goaltending
ID	Irregular dribble (ball handling)

OG	Offensive Goaltending
DD	Double Dribble
CA	Carrying/Palming

TTO (Z1) (Team)

Z1	Description
5	5 Seconds Violation
8	8 Seconds Violation
24	Shot clock violation
TTO	Foul

REB (Z1)

Z1	Description
D	Defensive
O	Offensive

TREB (Z1) (Team)

Z1	Description
D	Defensive
O	Offensive

FOUL (Z1)

Z1	Description
P	Personal foul
O	Offensive foul
T	Technical foul
E	Technical foul bench
T2	Disqualifying second technical/unsportsmanlike foul
U	Unsportsmanlike foul
Q	Disqualifying foul

FOUL (Z2)

Z2	Description
1	1 free throw awarded
2	2 free throws awarded
3	3 free throws awarded

FOUL (Z3)

Z3	Description
TI	Throw-In Foul

CFOUL (Z1)

Z1	Description
TC	Technical foul coach
TB	Technical foul bench
QC	Disqualifying foul coach
QB	Disqualifying foul bench

VTR (SU)

Z1	Description
N	Head Coach Challenge requested
+	Head Coach Challenge accepted/Successful
-	Head Coach Challenge rejected/Unsuccessful

VTR (Z1)

Z1	Description
CLK	Game & shot clock related challenge requested / accepted / rejected
PTS	Point related challenge requested / accepted / rejected
FT	Free throw shooting challenge requested / accepted / rejected
OGB	Out of bounds challenge requested / accepted / rejected
FOUL	Foul review requested / accepted / rejected
OGT	Goaltending challenge requested / accepted / Rejected
VIO	Violence review requested / accepted / rejected

Appendix

FIBA OVR Livestat format history

Version	Date DD/MM/YYYY	Modifications since last version
1.0	13/12/2012	Initial version
1.1	15/01/2013	Update
1.2	13/06/2013	Update AC Values and constraints
1.3	25/06/2013	Update Attribute STARTG/ STARTP/ ENDG/ ENDP
1.4	29/07/2013	regarding action codes → Inserted held ball situation
1.5	30/07/2013	Addition of non-technical information and reorganization of chapters
1.6	07/10/2013	Inserted graphical timeline for status during all game phases
1.7	22/10/2013	Inserted some actions to discuss and some questions Inserted a new graphical display for timeline during a period Resorted Actions by KUEMAR
1.8	11/11/2013	Inserted property name suggestions and Format to review
1.9	21/11/2013	Review and changes FIBA
1.10	29/11/2013	Inserted different specializations on actions, fouls and statistics. Inserted explanation on interface structure.
1.11	02/12/2013	Final version
1.12	04/02/2014	Inserted new time stamp in actions. Inserted the shotchart from the FIBA with new zone and new zone definitions
1.13	04/03/2014	Declaration und changing naming of mandatory fields and mandatory values
1.14	10/03/2014	Added 5.5.11 Disqualifying second technical foul
1.15	11/03/2014	Several typos and minor wording changes; bib number of athlete changed to string (2 positions)
1.16	29/04/2014	Inserted ShotClock property in the period action file
1.17	06/05/2014	Inserted TimeOut properties in the GameStats (TeamStats) section of the game json; Inserted sum of team fouls in the period (GameStats) in the game json
1.18	19/06/2014	Edit graphic 2 (inserted Q1 instead of Q2 in the first break. Substitution changes and Timestamp better described)
1.19	29/07/2014	Moved Starter property from Game Competitors to Game file (Chapter 4.13.)
1.20	17/02/2015	Inserted new extended court with coordinates
1.21	11/08/2017	Handling of new or edited participants created in the FLS (players and officials) with examples

1.22	13/04/2018	Additional action descriptions (Z1/Z3) have been added for P2/P3 and TO
1.23	14.11.2019	Added FGIA, FGIM & FGIP to team stats (Chapter 4.11) and player stats (Chapter 4.13)
1.24	08.01.2019	Added ParentId to Games and Teams officials (Chapter 4.3) Added Statistician data (Chapter 4.4)
1.25	15.07.2022	Added Throw-In Foul and Head Coach Challenge (VTR) action descriptions (Chapter 5.4 & 5.5)
1.26	29.08.2022	Added Technical Bench Foul
1.27	09.09.2022	Adding TTO 5 second, Correction FOUL & Bench Foul actions & description
1.28	01.07.2023	Adding Live Game Status 999 / Event-999-

