**Technical Instructions for the provision of an internet livestreaming signal**

1. If you plan to organize an internet livestream, please inform ETTU (ettu@pt.lu) and Sportradar (b.stak@sportradar.com) minimum 2 weeks before match day.
	1. The subject of the Email should include the following: **Livestreaming / European Team Qualification / match / date / time** (CET)
	2. Example 🡪 Livestreaming / European Team Qualification / Portugal vs. Hungary - Men / 27.02.18 / 18:00 CET
2. Please check your technical equipment and let us know which streaming quality you are able to provide (for details – see below)
	1. Maximum Requirements (very high quality)
	2. Basic Requirements (completely sufficient)
	3. Minimum Requirement (also still fine)
3. Be communicative and available for upcoming questions / especially at match day
	1. Provide Sportradar your skype account (best and fastest way for communication at match day)
	2. Send us the fixtures/match pairings 30min prior match start to video@unas.tv and fixtures@sportradar.com

For example:

* + 1. Portugal: A1 Freitas, A2 Apolonia, A3 Monteiro, Reserve Geraldo
		2. Hungary: B1 Lakatos, B2 Ecseki, B3 Majoros, Reserve Szudi

* + 1. Fixtures/Match Pairings

1. Match: Freitas - Ecseki

2. Match: Apolonia - Lakatos

3. Match: Monteiro – Majoros

Please inform us about (possible) changes after the third individual match

4. Match: Freitas - Lakatos

5. Match: Apolonia - Ecseki

* 1. Provide Sportradar your phone number

Here´s an example of the best workflow possible:

Email should be sent to: ettu@pt.lu, zpidl.ettu@gmail.com & b.stak@sportradar.com

*Subject of the email: Livestreaming / European Team Qualification / Portugal vs. Hungary - Men / 27.02.18 / 18:00 CET*

*Dear ETTU and Sportradar*

*The National Federation of Portugal plans to produce a livestreaming for the following match:*

*Portugal vs. Hungary - Men / 27.02.18 / 18:00 CET*

*Main Contact Person: Mr. XXX*

*Technical Contact Person (available at match day)*

*Name: Mr. xx*

*Skype account: tabletennisxxx*

*Mobile Phone number: +49 xxx xxx xxx*

*We can provide a live stream by fulfilling the basic requirements.*

*Regards, XXX*

Maximum Requirements

-          optimized for LCR over Satellite distribution

-          Video Settings Stream 2

|  |  |  |
| --- | --- | --- |
| Video Settings Stream 1 | Codec | H264 |
| Aspect Ratio | 16:9 |
| Resolution (px) | 1920 x 1080 |
| Framerate (fps) | 25 |
| Bitrate (kbps) | 5000 |
| Key frame interval | 50 frames or 2 seconds |
| Video Settings Stream 2 | Codec | H264 |
| Aspect Ratio | 16:9 |
| Resolution (px) | 480 x 270 |
| Framerate (fps) | 25 |
| Bitrate (kbps) | 450 |
| Key frame interval | 50 frames or 2 seconds |
| Audio Settings | Codec | AAC or MP3 |
| Bitrate (kbps) | 128 |
| Sample rate (kHz) | 44.1 or 48 |
| Channels | Stereo |
| Encoder | Flash Media Live Encoder (or similar software/hardware based system) |
| Ingest | Delivery (push) to Sportradar (or other affiliate) entry point (rtmp and/or udp protocol - software for udp will be provided by Sportradar/other affiliate) |
| Signal availability | Signal needs to be available at least 30 minutes prior to the beginning of the match |
| Traceroute | Please provide an up to date traceroute from venue to the active entry-point to the Sportradar Broadcast Centre (or other affiliate Broadcast Centre) |
| Speedtest | Please provide an up to date test from <http://www.speedtest.net> to a location close to the entry point, as a URL, and comment if upload speed was constant or fluctuating |

Basic Requirements

-          Video Settings Stream 2

|  |  |  |
| --- | --- | --- |
| Video Settings Stream 1 | Codec | H264 |
| Aspect Ratio | 16:9 |
| Resolution (px) | 1280 x 720 |
| Framerate (fps) | 25 |
| Bitrate (kbps) | 2000 |
| Key frame interval | 50 frames or 2 seconds |
| Video Settings Stream 2 | Codec | H264 |
| Aspect Ratio | 16:9 |
| Resolution (px) | 480 x 270 |
| Framerate (fps) | 25 |
| Bitrate (kbps) | 450 |
| Key frame interval | 50 frames or 2 seconds |
| Audio Settings | Codec | AAC or MP3 |
| Bitrate (kbps) | 128 |
| Sample rate (kHz) | 44.1 or 48 |
| Channels | Stereo |
| Encoder | Flash Media Live Encoder (or similar software/hardware based system) |
| Ingest | Delivery (push) to Sportradar (or other affiliate) entry point (rtmp and/or udp protocol - software for udp will be provided by Sportradar/other affiliate) |
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Minimum Requirements

|  |  |  |
| --- | --- | --- |
| Video Settings Stream | Codec | H264 |
| Aspect Ratio | 16:9 |
| Resolution (px) | 1280 x 720 |
| Framerate (fps) | 25 |
| Bitrate (kbps) | 2000 |
| Key frame interval | 50 frames or 2 seconds |
| Audio Settings | Codec | AAC or MP3 |
| Bitrate (kbps) | 96 |
| Sample rate (kHz) | 44.1 or 48 |
| Channels | Stereo |
| Encoder | Flash Media Live Encoder (or similar software/hardware based system) |
| Ingest | Delivery (push) to Sportradar (or other affiliate) entry point (rtmp and/or udp protocol - software for udp will be provided by Sportradar/other affiliate) |
| Signal availability | Signal needs to be available at least 30 minutes prior to the beginning of the match |
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