

**‘Unique’ Source Identifier (USID)
for use in the <OriginatorReference>
field of the Broadcast Wave Format**

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1. Recommendation

The EBU, Considering that:

Sound sources stored as files in a mass storage system need to be accessed and retrieved for programme production and exchange. Thus there is a need to label BWF [1] source sound files sufficiently uniquely that they can be identified unambiguously.

Such an identifier could also serve as the prime link to associate the audio file with metadata held in a database system. Applications can use the identifier instead of the file name to reference the BWF file unambiguously.

This identifier needs to be unique for each sound file, not just to identify the programme or producer and it would also be convenient if some elements of this identifier were human readable.

The <OriginatorReference> field in the BWF is a sequence of 32 ASCII characters (not a string) provided in the BWF to contain a unique identifier of the file. The organisation originating the BWF file is responsible for the allocation of the content of the field.

However, without some convention, potential users may find it difficult to generate a suitable unique identifier for the <OriginatorReference> field.

The EBU recommends;

That Members use the USID described in **§ 2** in the <OriginatorReference> fields of BWF files.

2. USID Generation

The USID in the <OriginatorReference> is generated using several independent randomisation sources in order to guarantee its uniqueness in absence of a single allocation authority.

An effective and easy-to-use randomisation method is obtained by combining user, machine and time specific information plus a random number.

These elements are:

- CC** Country code: (2 characters) based on the ISO 3166-1 standard [2]
- OOO** Organisation code: (3 characters) based on the EBU facility codes, Tech 3279 [3].
- NNNNNNNNNNNN** Serial number: (12 characters extracted from the recorder model and serial number) This should identify the machine’s type and serial number.
- HHMMSS** OriginationTime (6 characters,) from the <OriginationTime> field of the BWF.

These elements should be sufficient to identify a particular recording in a human-useful form in conjunction with other sources of information, formal and informal. In addition, the USID contains:

- RRRRRRRRR** Random Number (9 characters 0-9) Generated locally by the recorder using some reasonably random algorithm.

This element serves to separately identify files made at the same time, such as stereo channels, or tracks within multitrack recordings.

2.1 Examples of USIDs

Example 1

USID generated by a Tascam DA88, S/N 396FG347A, operated by RAI, Radiotelevisione Italiana, at time: 12:53:24

UDI format: CCOO NNNNNNNNNNNN HHMMSS RRRRRRRRR

UDI Example: ITRAI DA88396FG347 125324 098748726

Example 2

USID generated by a RadioMan workstation RMRFIN, S/N RFI011, operated by YLE, Finnish Broadcasting, at time: 08:14:48

UDI format: CCOO NNNNNNNNNNNN HHMMSS RRRRRRRRR

UDI Example: FIYLE RMRFINRFI011 081448 877248640

3. Bibliography

- [1] **EBU Tech 3285** Specification of the Broadcast Wave Format: A format for audio files in broadcasting
- [2] **ISO 3166-1** Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes.
- [3] **EBU Tech 3279** International Broadcast Tape Number (IBTN) Bar-code labels and register of Facilities Codes and Media Carriers.