
SMPTE EG 2021-3:2015

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SMPTE ENGINEERING GUIDELINE

Broadcast Exchange Format (BXF) — Use Cases



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Foreword

SMPTE (the Society of Motion Picture and Television Engineers) is an internationally-recognized standards developing organization. Headquartered and incorporated in the United States of America, SMPTE has members in over 80 countries on six continents. SMPTE's Engineering Documents, including Standards, Recommended Practices and Engineering Guidelines, are prepared by SMPTE's Technology Committees. Participation in these Committees is open to all with a bona fide interest in their work. SMPTE cooperates closely with other standards-developing organizations, including ISO, IEC and ITU.

SMPTE Engineering Documents are drafted in accordance with the rules given in its Standards Operations Manual.

SMPTE EG 2021-3 was prepared by Technology Committee 34CS.

Introduction

This section is entirely informative and does not form an integral part of this Engineering Document

Broadcast Exchange Format (BXF) is a protocol for exchange of data among broadcast systems such as Traffic, Program Management, Automation, and Content Distribution. It is intended to facilitate the movement of content and its associated metadata for better management, coordination and reporting between these broadcast systems. The BXF Protocol serves as a replacement for the many proprietary interfaces in place today between vendors in these areas.

1 Scope

Generally the Broadcast eXchange Format (BXF) defines the format and content of XML Messages for the interchange of data and metadata among professional systems, as follows:

1. Broadcast schedules, including playout and record schedules
2. As run information
3. Content metadata, such as Content ID, Title, Duration, etc.
4. Content management requests such as dub and purge requests
5. Requests for transfer of content some of which will result in the transfer of Content essence between professional systems.
6. Ports as used by TCP/IP for the exchange of messages

The primary systems envisioned as users of this standard are:

Program Management Systems
Broadcast Traffic Systems
Master Control Automation Systems
Content Distribution Systems

This particular document focuses on use cases of BXF, helping implementers to better understand how BXF may be used in a variety of scenarios.

2 Use Cases (Informative)

2.1 Metadata Update

Context of Use: The program management system is a repository for program scheduling information for the broadcast facility. Changes to the schedule by programming and its related metadata must be disseminated to the other stakeholders. Likewise, the traffic system maintains a list of formats that each program and/or time period uses to represent potential sales inventory. The combination of format and program schedule metadata is required to create a detailed event playlist for automation. To synchronize traffic and programming several transactions are required. This includes the process of initializing, adding, and deleting formats, programs and program schedules as well as scheduling specific title/episode information for a program.

The example below represents only one of several possible transactions. This is the updating of a traffic format structure initiated by the traffic system and sent to the programming system.

Origination System: Traffic

Destination System: Program Management

Trigger: Traffic changed the format in its system and is updating programming with the change.

Additional Stakeholders and Interests:

Traffic System – Creates format structures and needs to disseminate this data to programming when changes are made.

Program Management System – To properly time the actual length of a program, the format details are required. This tells the program department how much time must be reserved for non-programming content. Programming may need to adjust the length of the program content in order to keep the total length of the scheduled program within designated parameters.

Automation User – Accurate program timings are moved further up the scheduling decision path and improve the likelihood that the program's actual aired length matches to the planned scheduled length reducing last minute changes by the engineering staff.

QC staff – Reduces the number of last minute program changes that require additional approval by QC staff. If programming has accurate timings during the scheduling process they can avoid program modifications that might affect a program's QC status.

Preconditions: A session has been established.

Main Success Scenario:

Format Change or Update:

1. Traffic changes a format in their system and sends Programming the change that is the complete format structure including the changes made.
2. Programming accepts the format change and updates its records and replies back to track with a reply indicating that the update was successful.

Failure or other issues:

3. The format may already be in use on the schedule and changes to the format do not automatically get applied to all future dates. It is up to the scheduling or traffic system to cast the format change onto the schedule and send the schedule changes that this generates. If programming does not recognize the format in its system, then it can respond that the format was not updated or it can assume it needs to add the format as a new record. This would result in a different reply to the traffic system.
4. Use Case ends.

Example: Traffic changes an existing Format and sends the Program Management System the changes.

```
<?xml version="1.0" encoding="UTF-8"?>
<BxfMessage id="urn:uuid:ABCCDDDD-6000-11D3-8CFE-0050048383C9" dateTime="2006-08-16T20:44:43.16"
messageType="Information" origin="Traffic System" originType="Traffic" destination="Program Management" userName="Traffic
System User" xmlns="http://smpte-ra.org/schemas/2021/2015/BXF" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://smpte-ra.org/schemas/2021/2015/BXF BxfSchema.xsd">
  <BxfData action="update">
    <Format action="update">
      <FormatId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D9</FormatId>
      <FormatLength>
        <SmpteDuration>
          <SmpteTimeCode>00:30:00:00</SmpteTimeCode>
        </SmpteDuration>
      </FormatLength>
      <FormatName>SampleFormat_PrimeTime_Sitcom</FormatName>
      <FormatStructure>
        <FormatElements>
          <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D1</PrimaryElementId>
          <FormatElementType>Break</FormatElementType>
          <PrimaryOffset>
            <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
          </PrimaryOffset>
          <PrimaryDuration variable="false">
            <SmpteDuration>
              <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
            </SmpteDuration>
          </PrimaryDuration>
        </FormatElements>
      </FormatStructure>
    </Format>
  </BxfData>
</BxfMessage>
```

```

</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D2</PrimaryElementId>
  <FormatElementType>Segment</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="true">
    <SmpteDuration>
      <SmpteTimeCode>00:09:00:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
  <NonPrimaryElements>
    <NonPrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-
0038338391D2</NonPrimaryElementId>
    <NonPrimaryOffset>
      <OffsetTime>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </OffsetTime>
    </NonPrimaryOffset>
    <NonPrimaryDuration>
      <SmpteDuration>
        <SmpteTimeCode>00:00:10:00</SmpteTimeCode>
      </SmpteDuration>
    </NonPrimaryDuration>
    <NonPrimaryDescription>Station ID Bug</NonPrimaryDescription>
  </NonPrimaryElements>
</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D3</PrimaryElementId>
  <FormatElementType>Break</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:09:30:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="false">
    <SmpteDuration>
      <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D4</PrimaryElementId>
  <FormatElementType>Segment</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:10:00:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="true">
    <SmpteDuration>
      <SmpteTimeCode>00:09:00:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
  <NonPrimaryElements>
    <NonPrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-
0038338391D4</NonPrimaryElementId>
    <NonPrimaryOffset>
      <OffsetTime>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </OffsetTime>
    </NonPrimaryOffset>
    <NonPrimaryDuration>
      <SmpteDuration>

```

```

        <SmpteTimeCode>00:00:10:00</SmpteTimeCode>
      </SmpteDuration>
    </NonPrimaryDuration>
    <NonPrimaryDescription>Station ID Bug for segment 2</NonPrimaryDescription>
  </NonPrimaryElements>
</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D5</PrimaryElementId>
  <FormatElementType>Break</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:19:00:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="true">
    <SmpteDuration>
      <SmpteTimeCode>00:00:45:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D6</PrimaryElementId>
  <FormatElementType>Segment</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:19:45:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="true">
    <SmpteDuration>
      <SmpteTimeCode>00:10:00:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
  <NonPrimaryElements>
    <NonPrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-
0038338391D6</NonPrimaryElementId>
    <NonPrimaryOffset>
      <OffsetTime>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </OffsetTime>
    </NonPrimaryOffset>
    <NonPrimaryDuration>
      <SmpteDuration>
        <SmpteTimeCode>00:00:10:00</SmpteTimeCode>
      </SmpteDuration>
    </NonPrimaryDuration>
    <NonPrimaryDescription>Station ID Bug for segment 3</NonPrimaryDescription>
  </NonPrimaryElements>
</FormatElements>
<FormatElements>
  <PrimaryElementId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391D7</PrimaryElementId>
  <FormatElementType>Break</FormatElementType>
  <PrimaryOffset>
    <SmpteTimeCode>00:29:45:00</SmpteTimeCode>
  </PrimaryOffset>
  <PrimaryDuration variable="false">
    <SmpteDuration>
      <SmpteTimeCode>00:00:15:00</SmpteTimeCode>
    </SmpteDuration>
  </PrimaryDuration>
</FormatElements>
</FormatStructure>
</Format>
</BxfData>
</BxfMessage>

```

2.2 Schedule

Context of Use: After the preparation of the daily log, events (which typically include programming, commercials, promos/PSAs and other interstitial material) are sent to the automation system. Further processing is needed in many cases to prepare these events for airing through the automation system. This processing prepares the events to be automation-ready which can be executed for playout. A single or a group of events can be sent at one time. This use cases exemplifies the process to accept new or updated events.

Origination System: Traffic

Destination System: Automation

Trigger: Events submitted from the traffic system.

Additional Stakeholders and Interests:

Traffic System: Creates the completed schedule and submits it to the automation system for execution.

Automation System: Accepts and validates the schedule received from traffic, and executes said schedule at the appropriate time.

Preconditions: Events are available for playout.

Main Success Scenario:

Traffic System:

1. Traffic user selects a single or series of traffic events to be sent to the automation system.
2. Traffic user submits traffic events to the automation system.

Automation System:

3. Traffic events are accepted in automation system.
4. Traffic events are converted to automation events.
5. Automation database populates fields needed to execute playout (playout information includes timing, media, device, format, etc.)
6. Automation submits updated events (schedule and timing) information to the traffic database.
7. Use Case ends.

Example: A Playlist schedule for the Evening News on Network Affiliate WXXX with two local breaks.

```
<?xml version="1.0" encoding="UTF-8"?>
<BxfMessage id="urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F2" dateTime="2006-09-05T13:38:26.28"
messageType="Information" origin="Traffic System" originType="Traffic" userName="Traffic System User" destination="Automation"
xmlns="http://smpte-ra.org/schemas/2021/2015/BXF" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://smpte-ra.org/schemas/2021/2015/BXF BxfSchema.xsd"
xmlns:pmcp="http://www.atsc.org/XMLSchemas/pmcp/2007/3.1"
pmcp:schemaLocation="http://www.atsc.org/XMLSchemas/pmcp/2007/3.1/pmcp31.xsd">
  <BxfData action="add">
    <Schedule type="Primary" scheduleId="urn:uuid:00000000-0000-0000-0000-0038338391E0" scheduleName="WXXX Ch 6-
1" scheduleStart="2006-06-21T17:30:00.00" scheduleEnd="2006-06-21T17:30:00.00">
```

```

    <Channel channelNumber="6-1" status="active" type="digital_television" ca="false" shortName="WXXX-DT"
outOfBand="true">
      <pmcp:Name lang="eng">WXXX-DT Ch 6-1</pmcp:Name>
    </Channel>
    <ScheduledEvent>
      <ScheduleElements>
        <EventData eventType="Primary-ProgramHeader">
          <EventId>
            <EventId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F1</EventId>
          </EventId>
          <PrimaryEvent>
            <ProgramEvent>
              <SegmentNumber>1</SegmentNumber>
              <ProgramName>Evening News</ProgramName>
            </ProgramEvent>
          </PrimaryEvent>
          <StartTime nominalFlag="false">
            <SmpteDateTime broadcastDate="2006-10-01">
              <SmpteTimeCode>15:30:00:00</SmpteTimeCode>
            </SmpteDateTime>
          </StartTime>
          <LengthOption>
            <Duration>
              <SmpteDuration>
                <SmpteTimeCode>00:12:00:00</SmpteTimeCode>
              </SmpteDuration>
            </Duration>
          </LengthOption>
          <StartMode>Fixed</StartMode>
          <EndMode>Duration</EndMode>
        </EventData>
        <Content>
          <ContentId>
            <HouseNumber>Network-1</HouseNumber>
          </ContentId>
          <Name>Evening News Segment-1</Name>
          <Media>
            <BaseBand/>
            <MediaLocation>
              <Location>
                <RouterSource>
                  <Name>NEWS</Name>
                  <CrossPoint>PCL</CrossPoint>
                </RouterSource>
              </Location>
              <SOM>
                <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
              </SOM>
              <Duration>
                <SmpteDuration>
                  <SmpteTimeCode>00:12:00:00</SmpteTimeCode>
                </SmpteDuration>
              </Duration>
            </MediaLocation>
          </Media>
        </Content>
      </ScheduleElements>
      <ScheduleElements>
        <EventData eventType="Primary-BreakHeader">
          <EventId>
            <EventId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F2</EventId>

```

```

</EventId>
<PrimaryEvent>
  <NonProgramEvent>
    <Details>
      <AdType>General</AdType>
      <SpotType>Standard</SpotType>
      <Advertiser>
        <AdvertiserName>Johnson Ford Motors</AdvertiserName>
      </Advertiser>
      <Product>
        <Name>Car Sales Event</Name>
      </Product>
    </Details>
  </NonProgramEvent>
</PrimaryEvent>
<StartDateTime nominalFlag="false">
  <SmpteDateTime broadcastDate="2006-10-01">
    <SmpteTimeCode>15:42:00:00</SmpteTimeCode>
  </SmpteDateTime>
</StartDateTime>
<LengthOption>
  <Duration>
    <SmpteDuration>
      <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
    </SmpteDuration>
  </Duration>
</LengthOption>
<StartMode>Follow</StartMode>
<EndMode>Duration</EndMode>
</EventData>
<Content>
  <ContentId>
    <HouseNumber>JFMC1201</HouseNumber>
    <AlternateId idType="ISCI" authoritativeSource="AAAA">JFMC1201</AlternateId>
  </ContentId>
  <Name>Johnson Motors Super Sales Event</Name>
  <Media>
    <BaseBand/>
    <MediaLocation>
      <Location>
        <AssetServer fileTransferAllowed="true" playoutAllowed="true">
          <PathName>C:\MediaFiles\Commercials</PathName>
        </AssetServer>
      </Location>
      <SOM>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </SOM>
      <Duration>
        <SmpteDuration>
          <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
        </SmpteDuration>
      </Duration>
    </MediaLocation>
  </Media>
</Content>
</ScheduleElements>
<ScheduleElements>
  <EventData eventType="Primary-ProgramHeader">
    <EventId>
      <EventId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F3</EventId>
    </EventId>
  </EventData>

```

```

<PrimaryEvent>
  <ProgramEvent>
    <SegmentNumber>2</SegmentNumber>
    <ProgramName>Evening News</ProgramName>
  </ProgramEvent>
</PrimaryEvent>
<StartDateTime nominalFlag="false">
  <SmpteDateTime broadcastDate="2006-10-01">
    <SmpteTimeCode>15:42:30:00</SmpteTimeCode>
  </SmpteDateTime>
</StartDateTime>
<LengthOption>
  <Duration>
    <SmpteDuration>
      <SmpteTimeCode>00:10:00:00</SmpteTimeCode>
    </SmpteDuration>
  </Duration>
</LengthOption>
<StartMode>Fixed</StartMode>
<EndMode>Duration</EndMode>
</EventData>
<Content>
  <ContentId>
    <HouseNumber>Network-1</HouseNumber>
  </ContentId>
  <Name>Evening News Segment-2</Name>
  <Media>
    <BaseBand/>
    <MediaLocation>
      <Location>
        <RouterSource>
          <Name>NEWS</Name>
          <CrossPoint>PCL</CrossPoint>
        </RouterSource>
      </Location>
      <SOM>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </SOM>
      <Duration>
        <SmpteDuration>
          <SmpteTimeCode>00:10:00:00</SmpteTimeCode>
        </SmpteDuration>
      </Duration>
    </MediaLocation>
  </Media>
</Content>
</ScheduleElements>
<ScheduleElements>
  <EventData eventType="Primary-BreakHeader">
    <EventId>
      <EventId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F4</EventId>
    </EventId>
    <PrimaryEvent>
      <NonProgramEvent>
        <Details>
          <AdType>General</AdType>
          <SpotType>Standard</SpotType>
          <Advertiser>
            <AdvertiserName>Fortified Banks</AdvertiserName>
          </Advertiser>
          <Product>

```

```

        <Name>Discount Mortgage Promotion</Name>
      </Product>
    </Details>
  </NonProgramEvent>
</PrimaryEvent>
<StartDateTime nominalFlag="false">
  <SmpteDateTime broadcastDate="2006-10-01">
    <SmpteTimeCode>15:52:30:00</SmpteTimeCode>
  </SmpteDateTime>
</StartDateTime>
<LengthOption>
  <Duration>
    <SmpteDuration>
      <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
    </SmpteDuration>
  </Duration>
</LengthOption>
<StartMode>Follow</StartMode>
<EndMode>Duration</EndMode>
</EventData>
<Content>
  <ContentId>
    <HouseNumber>FBIN0901</HouseNumber>
    <AlternateId idType="ISCI" authoritativeSource="AAAA">FBIN0901</AlternateId>
  </ContentId>
  <Name>Discount Mortgage Promotion</Name>
  <Media>
    <BaseBand/>
    <MediaLocation>
      <Location>
        <AssetServer fileTransferAllowed="true" playoutAllowed="true">
          <PathName>C:\MediaFiles\Commercials</PathName>
        </AssetServer>
      </Location>
      <SOM>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </SOM>
      <Duration>
        <SmpteDuration>
          <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
        </SmpteDuration>
      </Duration>
    </MediaLocation>
  </Media>
</Content>
</ScheduleElements>
<ScheduleElements>
  <EventData>
    <EventId>
      <EventId>urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391F5</EventId>
    </EventId>
    <PrimaryEvent>
      <ProgramEvent>
        <SegmentNumber>3</SegmentNumber>
        <ProgramName>Evening News</ProgramName>
      </ProgramEvent>
    </PrimaryEvent>
    <StartDateTime nominalFlag="false">
      <SmpteDateTime broadcastDate="2006-10-01">
        <SmpteTimeCode>15:53:00:00</SmpteTimeCode>
      </SmpteDateTime>
    </StartDateTime>
  </EventData>

```

```

</StartDateTime>
<LengthOption>
  <Duration>
    <SmpteDuration>
      <SmpteTimeCode>00:07:00:00</SmpteTimeCode>
    </SmpteDuration>
  </Duration>
</LengthOption>
<StartMode>Fixed</StartMode>
<EndMode>Duration</EndMode>
</EventData>
<Content>
  <ContentId>
    <HouseNumber>Network-1</HouseNumber>
  </ContentId>
  <Name>Evening News Segment-3</Name>
  <Media>
    <BaseBand/>
    <MediaLocation>
      <Location>
        <RouterSource>
          <Name>NEWS</Name>
          <CrossPoint>PCL</CrossPoint>
        </RouterSource>
      </Location>
    <SOM>
      <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
    </SOM>
    <Duration>
      <SmpteDuration>
        <SmpteTimeCode>00:07:00:00</SmpteTimeCode>
      </SmpteDuration>
    </Duration>
  </MediaLocation>
</Media>
</Content>
</ScheduleElements>
</ScheduledEvent>
</Schedule>
</BxfData>
</BxfMessage>

```

2.3 Dub Order

Context of Use: Content is inventoried in traffic systems as the control point for the appropriate use of the material. Because the traffic system is the repository for the disposition of the information the dub process helps to administer the external content inventory. The dub process communicates the need for the content to be dubbed onto a medium (i.e. server, cart, etc.) for convenient playback.

Origination System: Traffic

Destination System: Automation

Trigger: Traffic user receives new content or there is a need to convert from tape-storage to server-storage.

Additional Stakeholders and Interests:

Automation User: Executes the ingesting of material, linking the metadata received in the dub-order from traffic to the essence either already stored or due to be ingested.

Traffic User: Sends the dub order to automation, thereby sharing metadata related to the essence in question with the automation system.

Preconditions: There is a need to create an order to dub, or purge content within the facility.

Main Success Scenario:

Traffic department:

1. Traffic user request content items to be placed on a dub order.
2. Traffic user submits dub order to automation system.

Automation system:

3. Automation user acknowledges new order for dub of content.
4. Automation system submits status for dub order to the traffic system.

Traffic system:

5. Traffic system accepts status and updates its database with the information from the automation system.
6. Use Case ends.

Example: Message and metadata to dub content essence

```
<?xml version="1.0" encoding="UTF-8"?>
<BxfMessage id="urn:uuid:ABCCDDDD-1111-22E3-9AFF-0048338391E1" messageType="Information" dateTime="2006-08-25T13:19:41.28" origin="Traffic System" originType="Traffic" destination="Automation" userName="Traffic System User"
xmlns="http://smpte-ra.org/schemas/2021/2015/BXF" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://smpte-ra.org/schemas/2021/2015/BXF BxfSchema.xsd">
  <BxfData action="add">
    <ContentTransfer transferId="urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391E1" transferType="Duplication"
priority="Normal">
      <Content>
        <NonProgramContent>
          <Details>
            <AdType>Promo</AdType>
            <SpotType>Standard</SpotType>
          </Details>
          <ContentMetaData>
            <ContentId>
              <HouseNumber>ITVS_HYP</HouseNumber>
            </ContentId>
            <Name>ITVS HYPERBOLE</Name>
            <Description/>
          </ContentMetaData>
        </NonProgramContent>
      </Content>
      <Source>
        <Media>
          <BaseBand>
            <Audio>
              <DigitalAudio>
```

```

        <Ac3Audio audioId="1"/>
      </DigitalAudio>
    </Audio>
    <Video>
      <Encoding>MPEG-2</Encoding>
      <DigitalVideo>true</DigitalVideo>
      <Format>720p</Format>
      <AspectRatio>4:3</AspectRatio>
    </Video>
  </BaseBand>
  <MediaLocation>
    <Location>
      <PhysicalAsset assetName="Tape">
        <MediaReferenceName>31-109</MediaReferenceName>
      </PhysicalAsset>
    </Location>
    <SOM>
      <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
    </SOM>
    <Duration>
      <SmpteDuration>
        <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
      </SmpteDuration>
    </Duration>
  </MediaLocation>
</Media>
</Source>
<Destination>
  <Media>
    <BaseBand/>
    <MediaLocation>
      <Location>
        <AssetServer playoutAllowed="true" fileTransferAllowed="true">
          <PathName>C:\media\commercials</PathName>
          <ReferenceName>AssetServerA</ReferenceName>
        </AssetServer>
      </Location>
      <SOM>
        <SmpteTimeCode>00:00:00:00</SmpteTimeCode>
      </SOM>
      <Duration>
        <SmpteDuration>
          <SmpteTimeCode>00:00:30:00</SmpteTimeCode>
        </SmpteDuration>
      </Duration>
      <ArchiveGroup>
        <ArchiveName>Interstitial</ArchiveName>
      </ArchiveGroup>
    </MediaLocation>
  </Media>
  <UsagePolicy>
    <PurgeDate>9999-12-31T00:00:00.00</PurgeDate>
  </UsagePolicy>
</Destination>
</ContentTransfer>
</BxfData>
</BxfMessage>

```

2.4 Purge Order

Context of Use: Content is inventoried in traffic systems as the control point for the appropriate use of the material. Because the traffic system is the repository for the disposition of the information the purge process (along with the dub order) also administrates the external content inventory. At the conclusion of the allowable run of the content a purge of the material from the playback medium is normally requested.

Origination System: Traffic

Destination System: Automation

Trigger: Dated content needs to be removed.

Additional Stakeholders and Interests:

Automation User: Accepts the purge order from traffic and removes the associated content from its inventory.

Traffic User: Sends an order to remove content from inventory.

Preconditions: There is a need to purge content within the facility.

Main Success Scenario:

Traffic system:

1. Traffic user requests content items to be placed on purge order.
2. Traffic user submits purge order to automation system.

Automation system:

3. Automation user acknowledges purge order to automation system.
4. Automation system submits status for purge order to the traffic system.

Traffic system:

5. Traffic system accepts status and updates its database with the information from the automation system.
6. Use Case ends.

Example: Purge Media by adding a new purge order for Media #311

```
<?xml version="1.0" encoding="UTF-8"?>
<BxfMessage id="urn:uuid:ABCCDDDD-2222-22E3-9AFF-0038338391E1" messageType="Information" dateTime="2006-08-16T20:44:43.16" origin="Traffic System" originType="Traffic" destination="Automation" userName="Traffic System User"
xmlns="http://smpte-ra.org/schemas/2021/2015/BXF" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://smpte-ra.org/schemas/2021/2015/BXF BxfSchema.xsd">
  <BxfData action="add">
    <ContentTransfer transferId="urn:uuid:ABCCDDDD-1111-22E3-9AFF-0038338391E1" transferType="Purge"
priority="Normal">
      <Content user="Traffic User">
        <ProgramContent>
          <ContentMetaData>
```