



**Video Services Forum, Inc.
News Letter**

Date: 6/30/2010

Issue #: 2010 – 1, Volume 13, Number 1

This is the thirteenth issue of the Video Services Forum (VSF) News Letter. The VSF feels that it is important to keep you informed about what is going on within the VSF since the VSF is your organization.

VSF Directors and Officers:

The current Board is shown below with their term expiration dates. VSF Board Members are elected by VSF Members during the VidTrans Conference and Exposition.

Director	Company	Term Expires
Rick Ackermans	Turner Broadcasting	2011
Pierre Costa	AT&T	2011
John Dale	Media Links	2011
Mary-Luc Champel	Thomson Grass Valley	2011
Richard Friedel	Fox Broadcasting	2012
John Mailhot	Harris Broadcast Communications	2012
Steve Storozum	Level 3 Communications	2012
Brian Wilson	Verizon	2012

The following VSF Officers were elected by the VSF Board for two-year terms, which expire February 2011.

President	Derek Smith	Consultant	2011
Vice President	Carl Ostrom	System Resource	2011
Secretary/Treasurer	Roger Hatcher	Consultant	2011

Administrative and Technical Staff:

Brad Gilmer – Gilmer and Associates, VSF Executive Director

Bob Ruhl – VSF Operations Manager

VSF Member List:

- A.R.G. (new member 2010)
- ATEME (new member 2010)
- Analog Devices, Inc.
- Artel Video Systems
- AT&T
- Barco Silex
- BRIDGETECH A/S
- British Telecommunications
- CBC/Radio Canada
- Cisco
- Cheetah Technologies
- Comtech EF Data
- D. Technologies
- DATASAT Tech (new member 2010)
- DekTec Digital Video B.V.
- Derek Smith - Consultant
- Dimetis GmbH
- DIRECTV
- DVBLink
- Envivio, Inc (new member 2010)
- Ericsson
- ESPN
- Evertz
- Fox Broadcasting
- Genesis Networks
- Harris Broadcast Communications
- IneoQuest Technologies
- intoPIX
- Level 3 Communications
- Media Links, Inc.
- Media Transport Solutions
- MediaXstream, Inc
- Merrill Weiss Group
- Miranda Technologies Inc.
- Mixed Signals Inc.
- Motorola, Inc.
- Net Insight
- Nevion
- Omneon, Inc. (new member 2010)
- Path 1, a division of IPVN
- Packet Storm (new member 2010)
- Qvidium Technologies, Inc.
- RGB Networks
- Roger Hatcher - Consultant
- Sencore, Inc.
- System Resource Consulting
- TANDBERG TV
- Telecom Product Consulting
- Telstra Corporation Limited
- Thomson Grass Valley
- Turner Broadcasting
- T-VIPS
- Verizon
- Video Clarity, Inc.
- VQLink Incorporated
- Vyvx
- Xlinux

Meetings and Conferences:

Upcoming events:

The **VSF October 2010 Meeting Series** will be held on October 6 & 7 in Austin, Texas hosted by ATT. Registration is open at www.videoservicesforum.org

VidTrans2011 Conference and Exposition will be held on February 1-3, 2011 in Los Angeles, California at the Marina Del Rey Marriott.

Past events:

The **Joint EBU/VSF 2010 Networks Seminar** was held June 22 & 23 in Geneva, Switzerland hosted by EBU.

The **VSF May 2010 Meeting Series** was held in May 19 & 20 in San Jose, California hosted by Cisco.

VidTrans2010 Conference and Exposition was held in Atlanta, Georgia at the Ritz Carlton, Buckhead Hotel on February 2-4, 2010. Thanks to our sponsors (A.R.G, Harris and Sencore) as well as our Exhibitors and Speakers VidTrans10 was a successful conference.

Activity Group Updates

(AGs) supply input and expertise to various industry standards bodies on behalf of the VSF. These are some of the topics that VSF Activity Groups are actively addressing:

CoP3 VBR Activity Sub-group: The Pro-MPEG work, defined as CoP3 for CBR MPEG2 transport streams over IP networks with FEC, was completed by the VSF and submitted to SMPTE and approved as SMPTE 2022-1 & 2022-2. The CoP3 VBR Activity Sub-group continues that work for VBR MPEG2 transport streams. This work was divided into two application focused activities. One work defines an interoperable standard for Piecewise Constant MPEG2 transport streams as defined in the ISO-13818 MPEG document. The other work defines an interoperable standard for Non-Piecewise Constant MPEG2 transport streams as often found in large scale distribution networks.

Both works have been completed and submitted to the SMPTE 32NF Technical Committee. The Piecewise Constant work has completed the SMPTE standards process and is in the publication phase as SMPTE 2022-3/2010. The Non-Piecewise Constant work is currently in the ballot process within the 32NF Technical Committee.

Chair: Carl Ostrom, System Resource

The original **HBRV-IP** activity group has been renamed to HBRMT (high bit rate media transport) The **HBRMT Encapsulation and FEC Committee** will create and shepherd a standard for an encapsulation and FEC process for high bit rate contribution oriented video/audio services up to 3Gbps over IP/Ethernet networks. This is to incorporate both uncompressed and JPEG2000 compressed video and audio formats.

1. Define encapsulation/FEC process for SMPTE 259M/C, SMPTE 292M, SMPTE 305M, SMPTE 424M, & JPEG2000. This will include both CBR RTP datagram streams (259M, 292M, 305M, and 424M) and VBR RTP datagram streams for JPEG2000

2. This shall include Liaison with other organizations such as EBU, IETF, JTC & SMPTE with the mission of creating of non-conflicting world wide standards for contribution video over IP

It is split into two working areas, Uncompressed/Wrapped media and JPEG2000 over MPEG2TS over IP. Currently both uncompressed/wrapped media and JPEG2000 over MPEG2TS over IP work is being continued in SMPTE 32-NF Video over IP Ad Hoc Group.

Co-Chairs: John Dale, Media Links, Inc., Pierre Costa, AT&T and Ryan Korte, Level 3 Communications

The **Quality of Experience (QoE)** Metrics Activity Group is expanding the work of the Test and Measurements Activity Group and its Recommendation on Video over IP Metrics to content-related QoE measurements. It has the following goals:

1. Define metrics for characterizing content quality of video streams (examples - spatial & temporal complexity, quantization, and motion intensity).
2. Describe the relationship between transport losses and video payload as a function of content (examples - losses of intra/inter predicted macroblock, losses of I/P/B-slice, losses of high motion content).
3. Produce a detailed list of metrics characterizing video quality, similar in format to the Video over IP Metrics report. The list will provide a description of each metric and how it is computed, its usefulness and application to video services, as well as possible measurement locations in a video delivery system.

We signed a Memorandum of Understanding with the ATIS IPTV Interoperability Forum for joint work on this topic.

Co-Chairs: Stefan Winkler, Symmetricom, and Pierre Costa, AT&T

Activity Groups Formed in 2010:

The goal of the **Interop Workshop** Activity Group is to conduct a series of Interop events during 2010 and 2011 as products become available for testing.

The Interop Workshop has set the first interoperability private workshop to be held on October 4 & 5, 2010 at ATT Labs, Austin TX. In addition this activity group will determine:

1. Number of participants that are willing to participate in various interoperability events throughout 2010/2011.
2. Type of interoperability most important to participants (i.e. SDI 259M over GbE and JPEG2000 over MPEG2TS over GbE, etc.)
3. When further interoperability tests will be held

4. Type of video clips to be utilized, testing methods and pass/fail criteria
5. Participation criteria (like be a VSF Member, active participant, agree to terms)
6. Actual testing requirements, set up and test plan

Chair: John Dale, Media Links, Inc.

The **SMPTE 2022 over SONET/SDH Committee** will extend the family of 2022 standards to SONET/SDH Networks allowing interoperability. The committee will utilize existing standards where possible to define a solution for vendors and carriers to carry SMPTE 2022 over SONET/SDH.

1. Define criteria for evaluation of existing standards.
2. Review existing Ethernet/IP to SONET/SDH standards and practices against the criteria.
3. Create a draft document of a straw-man recommended practice, engineering guideline, or standard allowing interoperability.
4. Organize interoperability tests.

Co-Chairs: Mike Bany, DVBLink and John Mailhot, Harris Broadcast Video

The **Video Content Project (VCP)** is a multi-disciplinary group that has been formed to develop a set of high-quality video clips to be distributed to VSF members for use in interoperability testing, codec/transport evaluation, and other purposes as approved by [the] VSF board. This content will, at a minimum, include HD content in at least two formats (720p and 1080i) and will focus on frame rates commonly used in North America (59.94 Hz and related rates).

This group is focused on achieving several main objectives, including:

1. Defining technical requirements for content.
2. Gathering and analyzing existing content to determine suitability.
3. Recommending rules for licensing and distributing content.
4. Creating original content if necessary

Liaison with the European Broadcasting Union may be established if appropriate, as well as links with SMPTE and other relevant organizations.

Co-Chairs: Wes Simpson, System Resource and Pierre Costa, AT&T

To learn more about these Activity Groups please visit:
<http://www.videoservicesforum.org/about/index.htm>.

SMPTE Committees:

"The VSF is providing resources to move several projects through the Society of Motion Picture and Television Engineers (SMPTE). Our work is being conducted under the 32NF Networking Technology Committee. There are two ad-hoc groups, both chaired by Brad Gilmer, Executive Director of the VSF. The first group is the VBR group. The second is the Video over IP group.

The 32NF Technology Committee is currently conducting a two-week review of a working draft of SMPTE 2022-4, VBR non-piecewise constant MPEG-2 Transport Streams over IP networks. Once any input from this review is received and reconciled, we intend to move this document to Committee Draft status and begin a formal due-process ballot as part of moving the document through to adoption and publication. At the last SMPTE meeting, the 32NF committee agreed to adopt a work statement which covers transport of JPEG 2000 on IP networks. It is likely that this work will be assigned to the Video over IP Ad Hoc Group at the next SMPTE meeting in September. We now have a first draft of a JPEG 2000 on IP document which has been presented to the VSF HBRAV group.

Finally, we have made good progress on mapping High Bit Rate Media Transport (formerly High Bit Rate Audio/Video) onto IP networks, and we have resolved all outstanding comments. We still have quite a bit of work to do on the HBRMT FEC document, but the committee is making good progress on these issues. I anticipate that we will be in a position to introduce these two documents to the SMPTE in September. These two documents standardize the carriage of uncompressed A / V at rates up to 3 GB/sec, and also support MXF encapsulation of media. Please contact Brad Gilmer (brad@gilmer.tv) if you would like to participate in any of these activities.

Other News:

We will be changing the VSF **members-only single access code** for VSF Meetings and VidTrans conference presentations located in the archive section on July 15, 2010. VSF Members will be provided with the new access codes prior to the change.

That's it for now. If you have any comments or suggestions, or if there is a topic that you would like to see covered in the next issue of the News Letter, please contact Bob Ruhl at **bob.ruhl1@verizon.net**.