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What's Happening at a Standards Organization Near You?

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SMPTE

Standards

- Lots going on
- Wendy promoted again—now Executive VP
- Hans Hoffmann (EBU) now Engineering VP

AMPAS Image Interchange Framework (IIF)

- Academy Color Encoding Specification (ACES)
- Academy Density Exchange Encoding (ADX) — Encoding Academy Printing Density (APD) Values
- Academy Printing Density (APD) — Spectral Responsivities, Reference Measurement Device, and Spectral Calculation

And, of Course, 3D!

- 3D Home Master
 - Single delivery format for content producers
 - Single source for all distribution channels
 - Chaired by Ted Szypulski, ESPN
 - More than 160 members
 - Groups for Image, Metadata, Captions/Graphics
 - Documents now in final draft
- 3D disparity map representation

ST2021: BXF – the Broadcast Exchange Format

- XML-based for data exchange between program management, traffic, automation, and distribution systems
- Over 80 companies participated!
 - ST Part 0: Roadmap for the 2021 Document Suite
 - ST Part 1: General Information and Informative Notes
 - ST Part 2: Protocol
 - EG Part 3: Use Cases
 - EG Part 4: Schema Documentation
 - RP Part 9: Implementing BXF

BXF Continued

- On-going work as part of 'BXF 2.0':
 - BXF-MXF Metadata Mapping
 - Schema additions
 - SCTE 104 and 130 support
 - AFD Support
 - Audio structure review
 - PMCP
 - Non-linear support
 - Multi Channel Audio labeling

ST 2022-x Video over IP

- In conjunction with VSF
- Multipart suite. Parts already published are:
 - Part1: Forward Error Correction for Real-Time Video/Audio Transport Over IP Networks
 - Part 2: Unidirectional Transport of Constant Bit Rate MPEG-2 Transport Streams on IP Networks
 - Part 3: Unidirectional Transport of Variable Bit Rate MPEG-2 Transport Streams on IP Networks

ST 2022-x Video over IP (Under Development)

- Part 4: Unidirectional Transport of Non-Piecewise Constant Variable Bit Rate MPEG-2 Streams on IP Networks
- Part 5: Forward Error Correction for High Bit Rate Media Transport over IP Networks - Larger FEC matrix supports HBR and MXF encapsulation
- Part 6: High Bit Rate Media Transport over IP Networks - Supports Uncompressed chroma/luma over RTP/UDP/IP, MXF over RTP/UDP/IP (thus supporting JPEG 2000 encapsulated in MXF)



Synchronization & Time Labeling

- Slower than expected
 - IEEE 1588 developing in right direction
 - May be more IT standards-based than we expected
- Time Labeling—a new TimeCode?
 - HPA & AMPAS organized meeting with Hollywood community—great input!
 - Back when we have a strawman

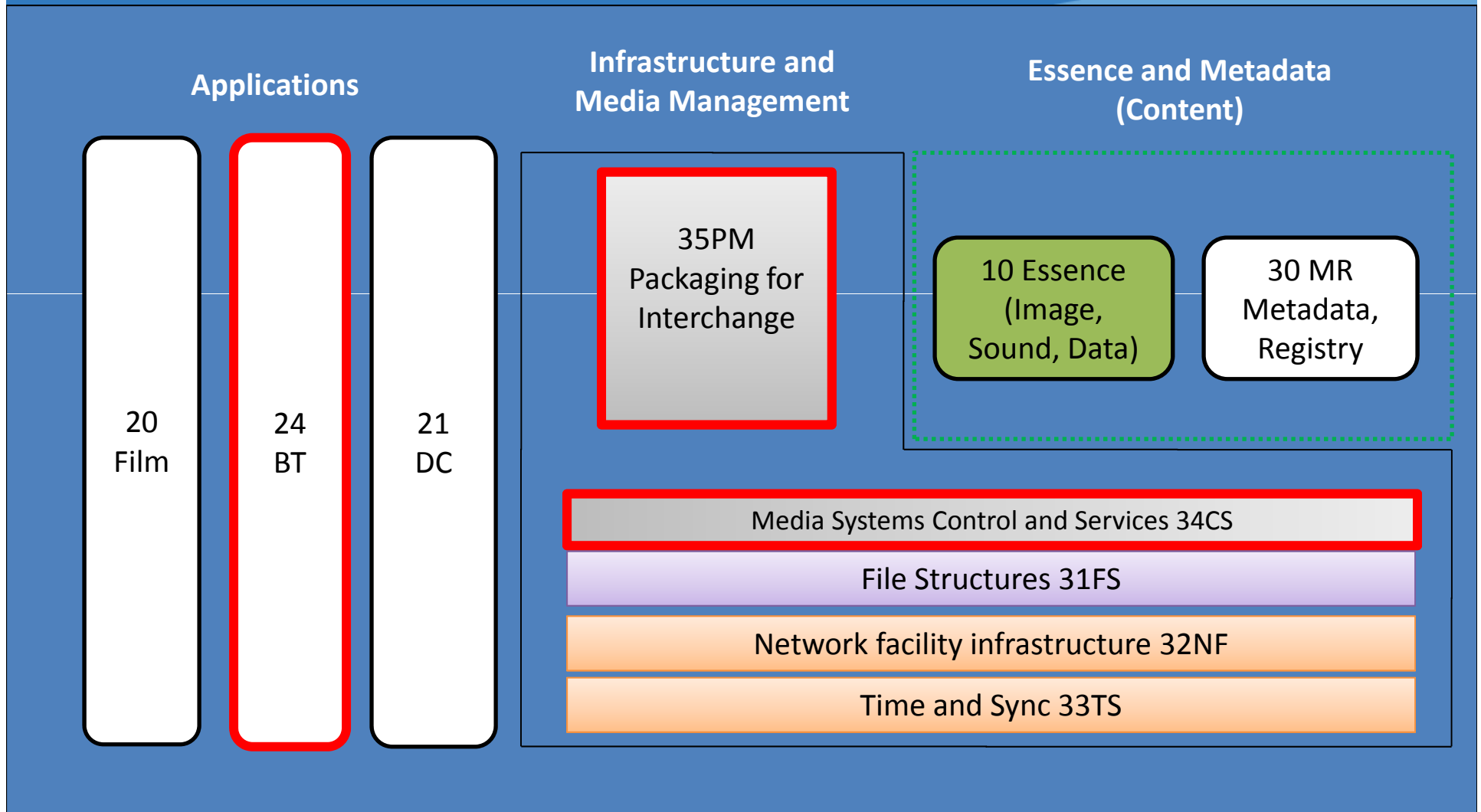
Just a Few of the Other Projects

- Reference Fixed Pixel Matrix Display
 - Get the EOTF right first?
- Lip Sync
- Dolby E for 50P & 60P
- Archive Exchange Format
- 25 Gb/s fiber interfaces
- Accessibility–Timed Text for D-Cinema & Broadband
- Continuing D-Cinema work
- Lots of MXF and Metadata work

Three New Committees

- **TC on Broadband Media and Television**
 - The General Scope as applied to mastered essence for television and broadband distribution (both separately and for hybrid television/broadband environments), including compression, encryption, wrapping, marking, packaging, media, tracking/control, presentation, reproduction, and related topics.
- **TC on Media Packaging and Interchange**
 - The General Scope as applied to the packaging of media elements, to facilitate interchange and interoperability of formats within specific integrated application ecosystems in the professional fields of media creation, production, post-production archiving and related topics.
- **TC on Media Systems, Control and Services**
 - The General Scope as applied to the implementation of media services, methods of managing and controlling hardware devices and software systems, and the management of media workflow processes, including associated signalling and control mechanisms

The Standards Ecosystem

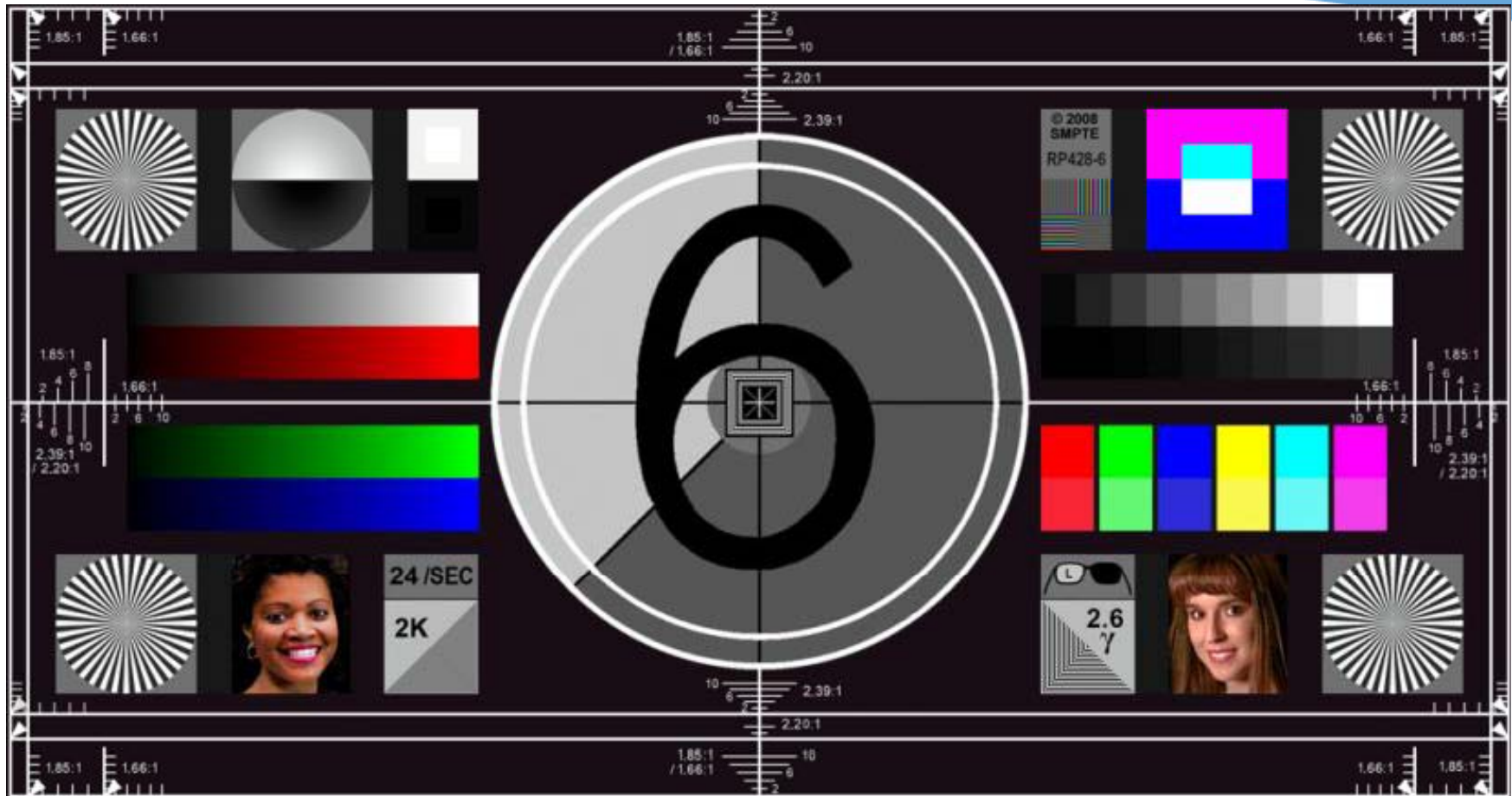


Digital Leader & DPROVE

- Digital Leader is set of TIFFs and WAVs for leaders and footers when making DCDMs
- DPROVE is set of DCPs for use in theaters, viewing rooms, etc.
- 36 DCPs –all standardized variants of
 - 1.85, 1.9 (full container), 2.39
 - 2-D, 3-D
 - 24, 25, 30, 48, 50, 60fps
 - 2k, 4k



Digital Leader & DPROVE



Meanwhile at the Home Office

- Professional Development Academy–PDAs
 - Monthly Webinars; free to members
 - 10 March: Is there a 4K Roadmap?
 - Thur 14 April: Making sense of the World of Codecs
 - Thur 12 May: Depth Acquisition Techniques
 - Thur 9 June: Managing Mobile Content from the Field
 - Thur 14 July: Status of Cinema Audio Standards
 - Thur 11 Aug: The Digital Ecosystem: Rights Management
 - Thur 8 Sept: Autostereoscopic Displays: State of the Art and the Way Forward

Conferences

- 9-10 April 2011: [DCS 2011: Advances in Image and Sound: 3-D, 4K and Beyond](#), Las Vegas, NV, USA
- 12, 14, 24 and 26 May: [2011 SMPTE Regional Seminars - Practical Steps In Implementing An Effective File Based Workflow](#)
- 6 - 7 June 2011: Washington DC Section, *Chesapeake Beach, MD, USA*
- 21 - 22 June 2011: [2nd International Conference on Stereoscopic 3D for Media and Entertainment](#), New York, NY, USA
- 19 - 22 July 2011: [SMPTE Australia Conference and Exhibition](#), Sydney, Australia
- 24 - 27 October 2011: [SMPTE Annual Technical Conference and Exhibition](#), Hollywood, CA, USA

***New* for Europe!**

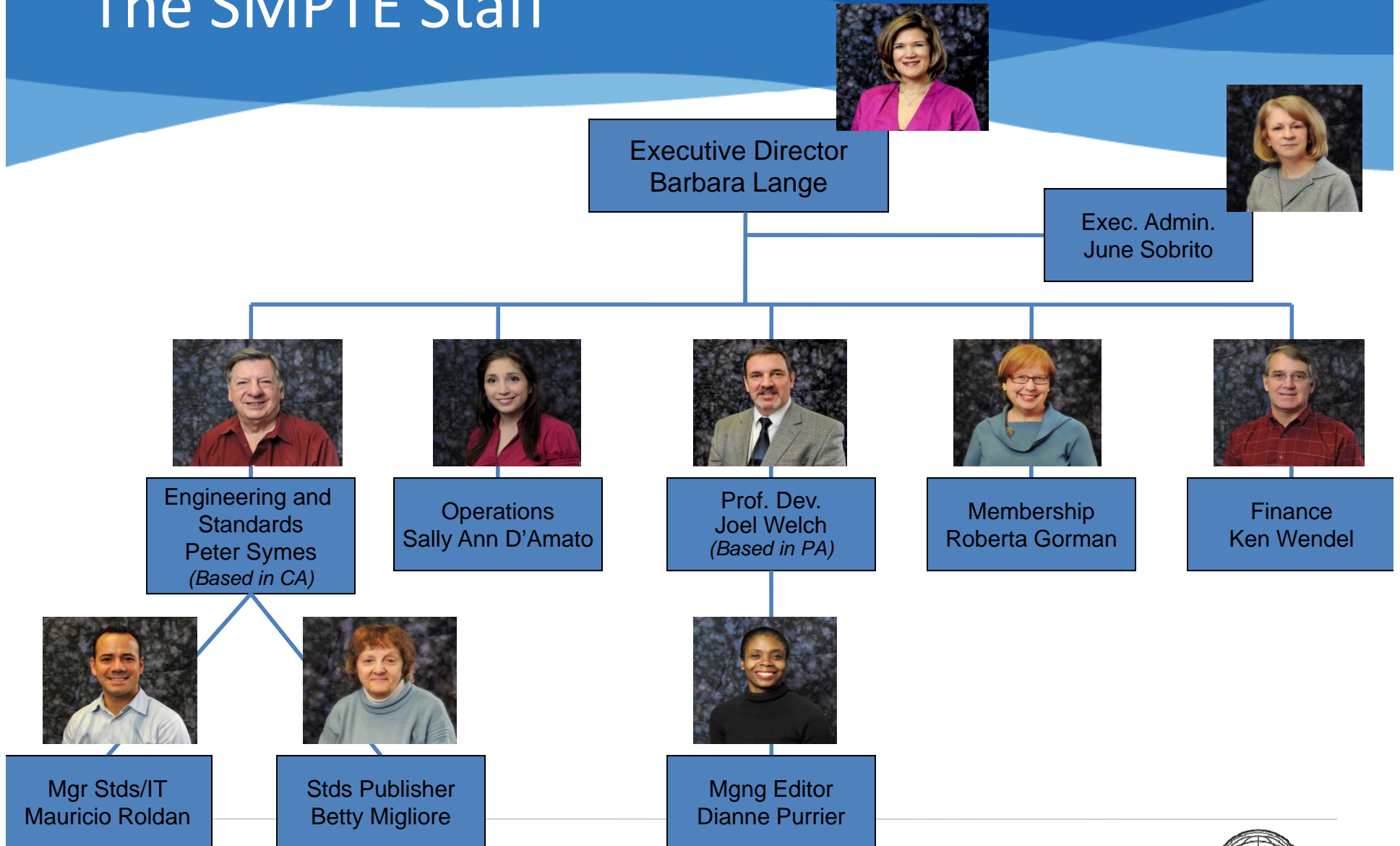
- **Global Summit on Emerging Media Technologies**
- **May 2012**
- **Geneva**
- **In conjunction with EBU**



New Look; New Facilities

- A complete re-build of SMPTE's web presence
 - New website
 - New member database system
 - New facilities for sections
 - A Digital Library
 - Standards, Conference Proceedings, and the Journal—***everything from 1916 will be online!***

The SMPTE Staff





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THANK YOU!