



ON-SET VIRTUAL PRODUCTION

# SMPTE ATLANTA SECTION MEETING

Kari Grubin  
Project Director  
April 11, 2022



*The home of media professionals, technologists, and engineers*

# THE VIRTUAL PRODUCTION INITIATIVE

A Rapid Industry Solution, Facilitated by SMPTE

SMPTE's mission has always been to bring together members of the Media and Entertainment industry, providing a forum for the exchange of ideas and information. In today's rapidly changing environment, the industry needs a more collaborative approach to meet its challenges. SMPTE is committed to providing a platform for the industry to share its knowledge and experience, and to facilitate the development of new solutions. Based on this guidance, we are responding with a new initiative, the Virtual Production Initiative, which will focus on the complexities of on-set Virtual Production.

## VIRTUAL PRODUCTION

Physical and digital worlds interact in real-time as they are composed and captured on set, by combining traditional production tools with virtual production tools.

Enabling the creation of Virtual Production environments will require a wide range of technology and expertise. We will establish a working group, bringing together technology companies, traditional production users, manufacturers, educational institutions and professional organizations. We need the best minds in the industry to assess the challenges, establish our goals and deliver a fast-track response.

## The Complex Challenges

Our in-depth discussions with groups and individuals in all aspects of the on-set Virtual Production pipeline have uncovered a number of hurdles preventing many from deploying these new content creation technologies.

**Interoperability and Compatibility.** While there is still technical and creative flux, many of the production tools and systems are proprietary, and a lack of interoperability is a major barrier to the first and foremost priorities.

**Lack of Resources.** The shortage of available trained crew members, as well as hardware, software, components and content are another large stumbling block.

- **Education and Training Gap.** There is a large lack of education for both media and entertainment professionals, and game engine technicians, as well as cross-training between the two disciplines. Business leaders may also lack an understanding of the costs, benefits and resources involved.

## The Goals

Our primary goal is to establish interoperability, which will enable the industry to develop a common language to smooth collaboration, building on whichever format the creative industry chooses to leverage. We will operate with a faster, more flexible technology review model outside the existing SMPTE standards framework, with all resulting technical work made open and free to the industry.

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- **Train at all Levels.** Building on SMPTE's long expertise in technical education and existing offerings from our industry partners, we will develop a fast-track response for general professional development, technical training and business training and skills. We will work with industry professionals, professional organizations and system integrators to ensure that training meets real-world needs.

# WORLDWIDE PARTICIPATION

# SCRIPTED, BROADCAST and EDUCATION

# What the Industry Needs ....



## Training and Education

- ❖ Leverage existing education offerings from Industry Partners
- ❖ Work with Advisory Group to develop unique offerings for *General Education, Professional Development and Technical Training*
- ❖ **LACK OF PERSONNEL AND TECHNICAL RESOURCES!**

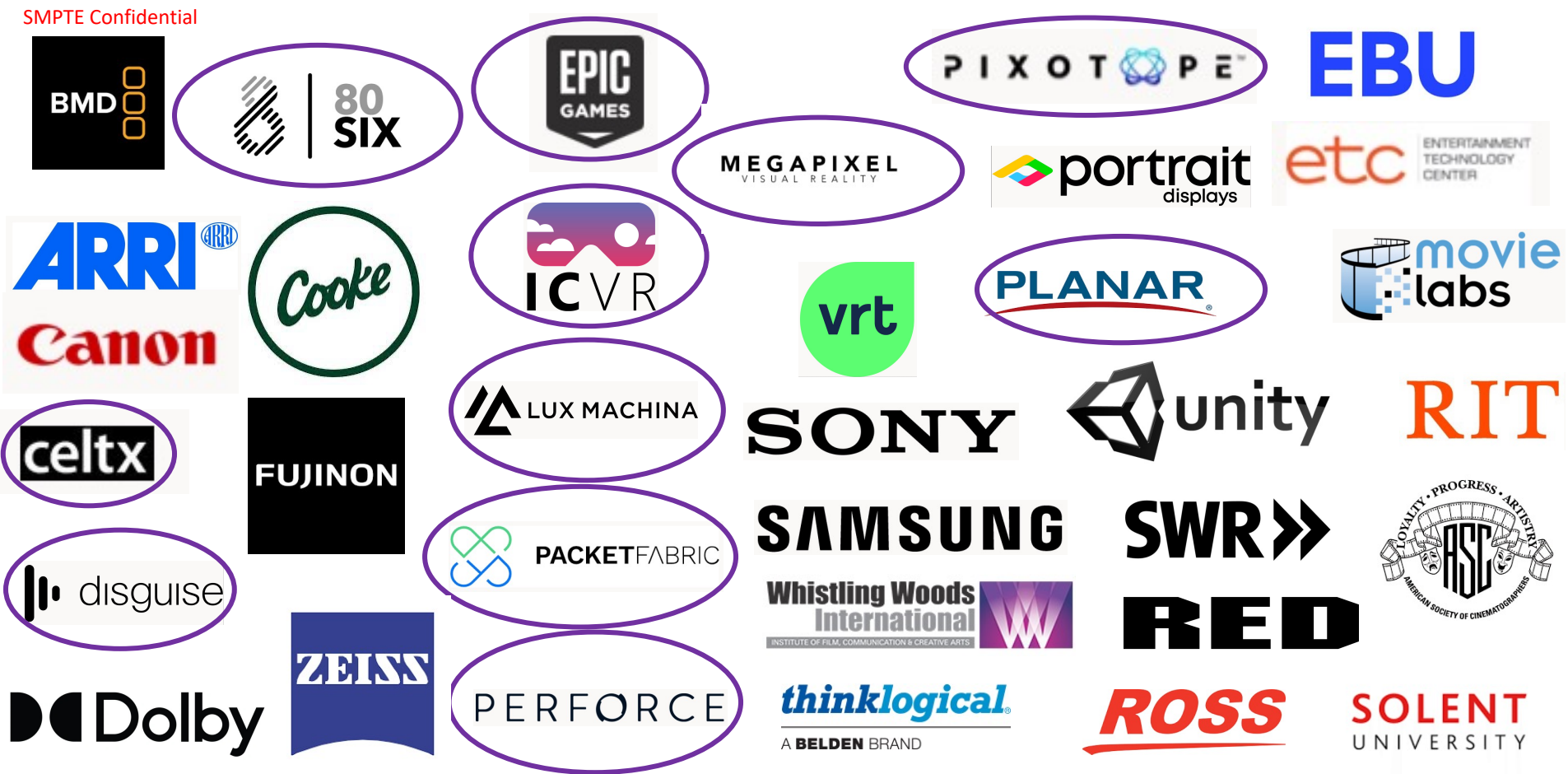
## To Enable Systems Interoperability

- ❖ Technology review model is different – faster and more flexible – than due process model
- ❖ Tech work will be made open to industry

# RAPID INDUSTRY SOLUTIONS

- ❖ Provide a neutral, non-commercial platform to facilitate rapid industry solutions
- ❖ Enlist **Industry Advisory Group** to guide the work to ensure **SMPTE IS ACCOUNTABLE** to the needs of the industry
- ❖ SMPTE will curate these new deliverables, including **development of education offerings** and **enabling systems interoperability (i.e., standards)**
- ❖ New flexible financial model to evaluate sustainability via project sponsorship, with proponents funding the initiative





**OVER 58 ADVISORY GROUP MEMBERS INCLUDING COMPANIES AND INDIVIDUAL CONTRIBUTORS!**



# Overview of Progress

- Advisory Group
  - Monthly Meetings since August
  - Surveyed for top issues of concern
- Workstreams defining goals and deliverables
  - Education
  - Interoperability
  - Outreach



# Interoperability Workstream Efforts

Top Interoperable Subjects identified by [SMPTE RIS](#) volunteers:

- **OnSet** - Entire Workflow Process and Interoperability Challenges
- **Camera** - Source of Truth (Multiple Sources) plus Hero Metadata
- **Ecosystem** - Workflow Connectivity and Data/Asset Management
- **File Formats** - Various Data and Metadata sources and Transport Containers
- **Color Science** - Existing Standards and processes that need to be incorporated

# Timeline of initiatives – Focus Interoperability workstream




			2022			
			Q1	Q2	Q3	Q4
On Set Workflow -Interoperability Challenges			<div><div></div><div></div><div></div><div></div><div></div></div>			
Define and Recommend Best Practices			<div><div></div></div>			
Technical Solutions	Led Walls	<div><div></div></div>	<div><div></div><div></div></div>			
		<div><div></div></div>	<div><div></div></div>			
	Physical Connections	<div><div></div></div>	<div><div></div></div>			
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# Outreach Workstream

FEBRUARY

Owner Session



SMPTE Session: Exploring the Rules of the Road for Virtual Production

Wednesday, 02 February 2022  
10:00 - 10:45 | Europe/Amsterdam  
On Demand Only



SMPTE  
2 Feb 2022  
Virtual Production

80 SIX | ETC | mo-sys | disguise | SOLENT UNIVERSITY



HPA  
TECH RETREAT 2022

SUPERSESSION FEB. 22



PRODUCTION  
TECHNOLOGY  
SEMINAR  
AN EBU EVENT  
FROM REAL TO SUSTAINABLE  
AND VIRTUAL WORLDS

MARCH/APRIL



SMPTE  
TORONTO



SMPTE  
NEW YORK

Connecticut Subsection/  
Women In Media



SMPTE  
ATLANTA



NABSHOW  
Where Content Comes to Life

April 26

*Looking Forward – SIGGRAPH, IBC, SMPTE MTS*



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# Timeline of initiatives – Focus Education workstream

		2022			
Activity		Q1	Q2	Q3	Q4
Crew	Curate current publicly accessible OSVP educational offerings				
Business	Industry organization co-programming <small>(in partnership with Outreach and SMPTE Education department)</small>				
	Update/refinement of OSVP Workflow wallchart to create a new INTERACTIVE PLATFORM				
Students	Develop “missing” educational content				
	Inexpensive stages for students – Resource Grant Program				



# Collaboration between RIS & Standards Community

- RIS brings together a unique mix of subject matter experts, users and manufacturers
- Opportunity is for RIS to identify and discuss pain points around interoperability
- RIS is well-suited to identify, document and prioritize use-cases and associated requirements
- SC is well-suited to create technical specifications based on identified requirements

*Agreeing on requirements is the difficult/time consuming part*

Slide courtesy of Florian Schleich, VP of Standards

# Want to know more about RIS?

## Project Management

### Contact:

Kari Grubin

Project Director

[kari.grubin@gmail.com](mailto:kari.grubin@gmail.com)

Visit the SMPTE Website and  
RIS Landing Page:

<https://www.smpte.org/rapid-industry-solutions/on-set-virtual-production?hsLang=en>

### Other Contacts –

*SMPTE Main Office or  
RIS Project Management group email*  
[RIS-OSVP-PM@smpte.org](mailto:RIS-OSVP-PM@smpte.org)

Existing Education Resource Survey: <https://www.surveymonkey.com/results/SM-8WD6P5YC9/>



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Thank You!