MP20 Workshop, Co-located with the 116th MPEG Meeting

Industry Meets MPEG

MPEG 116 – 19 Oct '16 - Chengdu

Workshop Outline

- Welcome!

- Introduction to Roadmap

- Input and feedback from MPEG's customers

- Discussion

- Conclusions

Workshop Objectives

- **Invite** traditional, non-traditional and disruptive industry representatives to MPEG

- Inform industry of MPEG's **strategic intentions**

- **Collect feedback** from industry

- Identify **needs for standards**

- Goal: enable large **markets to flourish** through MPEG standards

Program

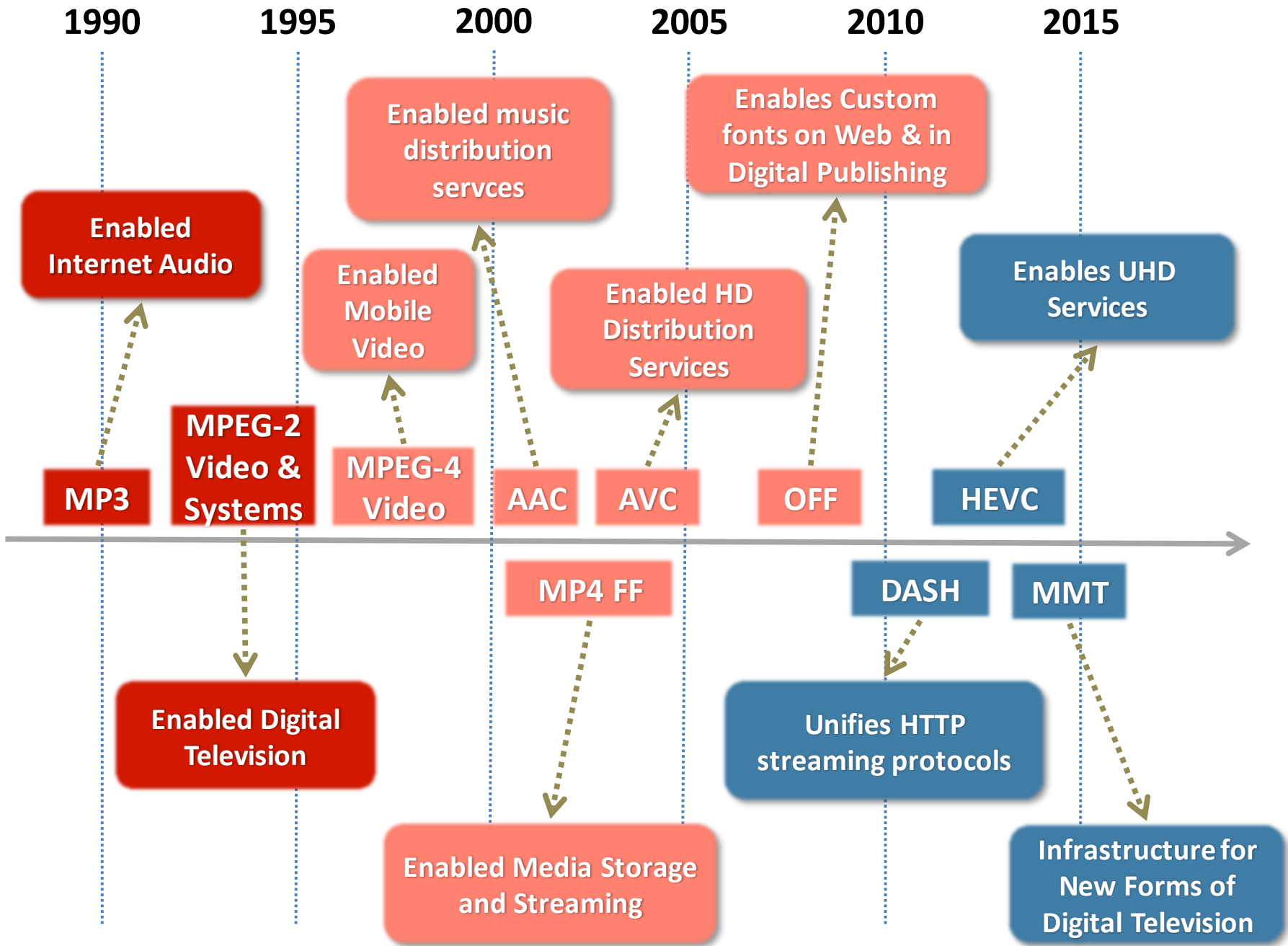|		
13:00	*Opening Address*	Leonardo Chiariglione, Convenor, MPEG
13:10	*MP20 Roadmap*	Rob Koenen; José Roberto Alvarez, MPEG Vision Ad Hoc Group
13:25	*AVS related Standards and Testing*	Dr. Wenhui Dong, SARFT
13:50	*Current Status and Prospect of K-UHD with New Media Services*	Dr. Chieteuk Ahn, ETRI
14:15	*8K broadcasting toward Tokyo Olympics*	Mr. Yuji Yamana, NHK
14:40	**Break**	
15:00	*Future of Video Evolution*	Mr. Toshiyuki Ogura, Sony Corporation
15:25	*Future Media Network in the 5G Era*	*Prof. Wenjun Zhang, Shanghai Jiao Tong University*
15:50	*Emerging Markets, Specialized Standards*	Mr. Wenfei Jiang, Alibaba Cloud
16:15	**Break**	
16:30	*Virtual Reality—A new way of entertainment.*	Mr. Wenbo Sun, LetinVR Digital Technology Company
16:55	*Virtual Reality: The New Era of the Future World*	Mr. Raymond Pao, HTC
17:20	*Discussion*	End around 18:00

MP20 Standardisation Roadmap

Why a Standardisation Roadmap?

- MPEG has created, and is still producing, media standards that enable **huge markets to flourish**
- MPEG works on **requirements from industry**
- Many industries represented in MPEG, but not all of **MPEG's customers** can or need to participate in the process
- MPEG wants to inform its customers about its **long-term plans** (~ 5 years out)
- … and **collect feedback and requirements** from these customers
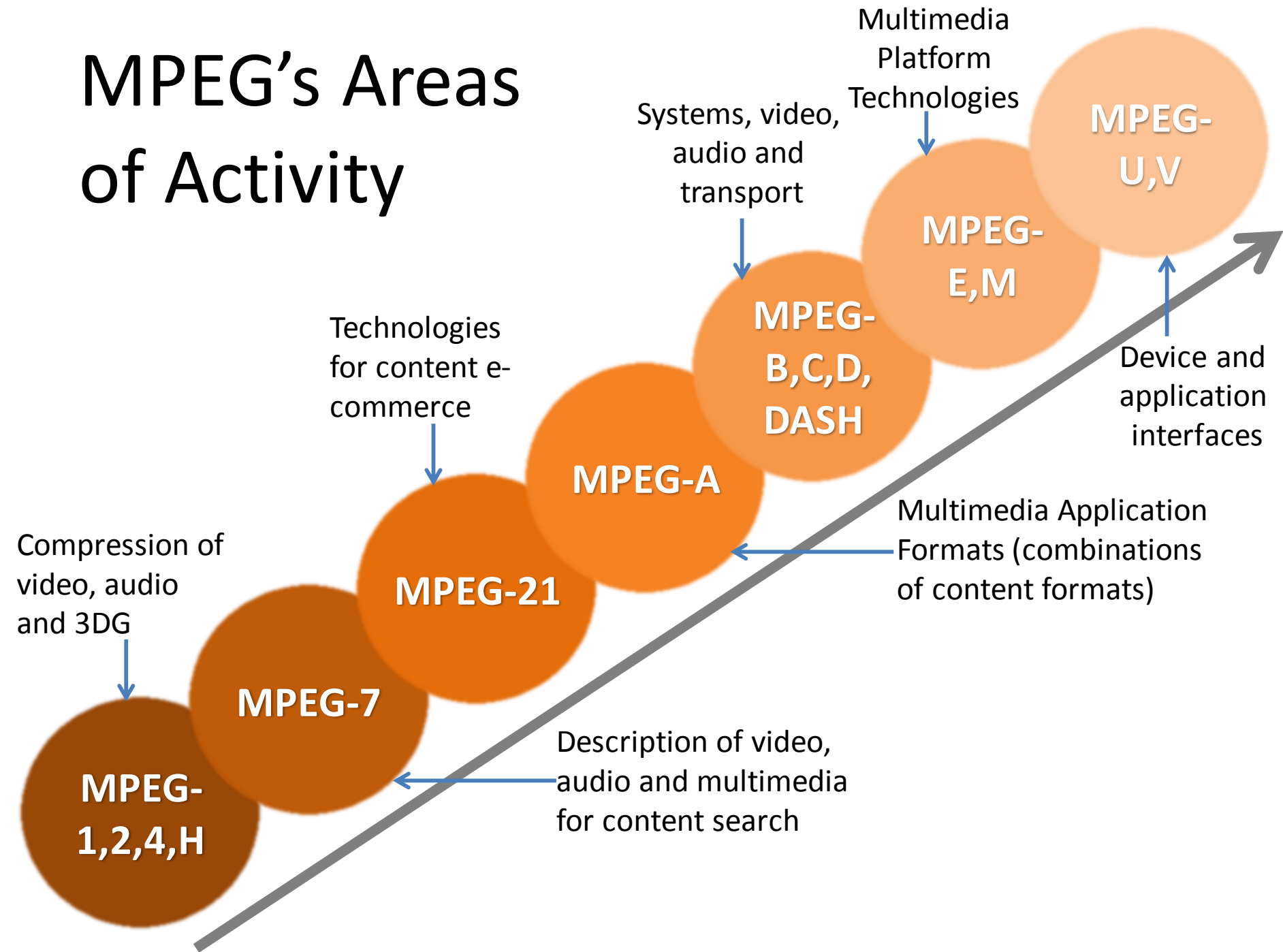- … including in this session

What is in the Roadmap

- Our roadmap is a short document.
- It briefly outlines MPEG's most important standards

Timeline

1990 | 1995 | 2000 | 2005 | 2010 | 2015

Enabled Internet Audio → MP3

MPEG-2 Video & Systems → Enabled Digital Television

Enabled Mobile Video ← MPEG-4 Video

Enabled music distribution servces ← AAC

MP4 FF → Enabled Media Storage and Streaming

Enabled HD Distribution Services ← AVC

Enables Custom fonts on Web & in Digital Publishing ← OFF

Enables UHD Services ← HEVC

DASH → Unifies HTTP streaming protocols

MMT → Infrastructure for New Forms of Digital Television
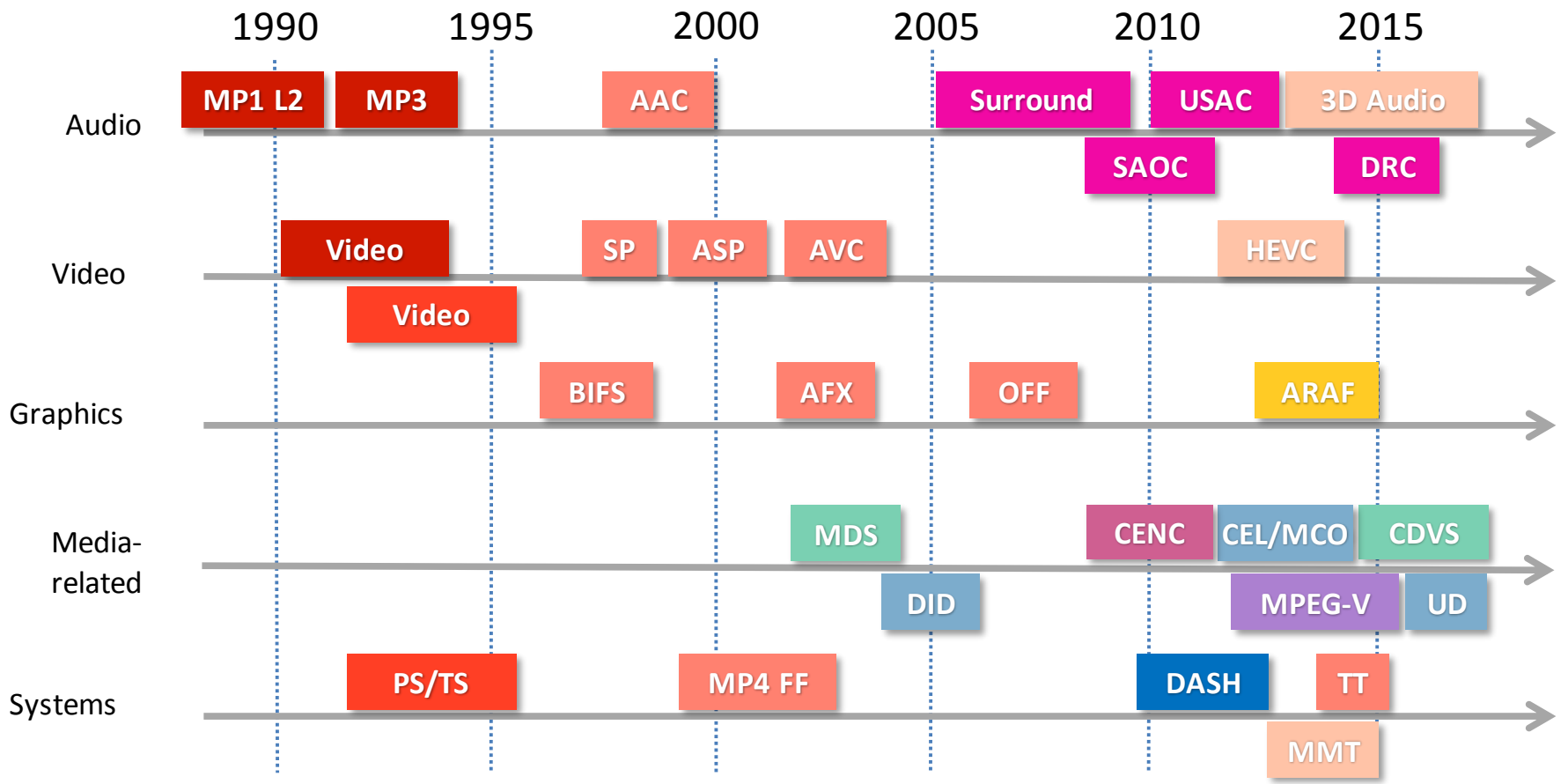
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- It briefly outlines MPEG's most important standards
- It then gives an overview of the areas of MPEG's activities

MPEG's Areas of Activity

MPEG-1,2,4,H

Compression of video, audio and 3DG

MPEG-7

Description of video, audio and multimedia for content search

MPEG-21

Technologies for content e-commerce

MPEG-A

Multimedia Application Formats (combinations of content formats)

MPEG-B,C,D, DASH

Systems, video, audio and transport

MPEG-E,M

Multimedia Platform Technologies

MPEG-U,V

Device and application interfaces

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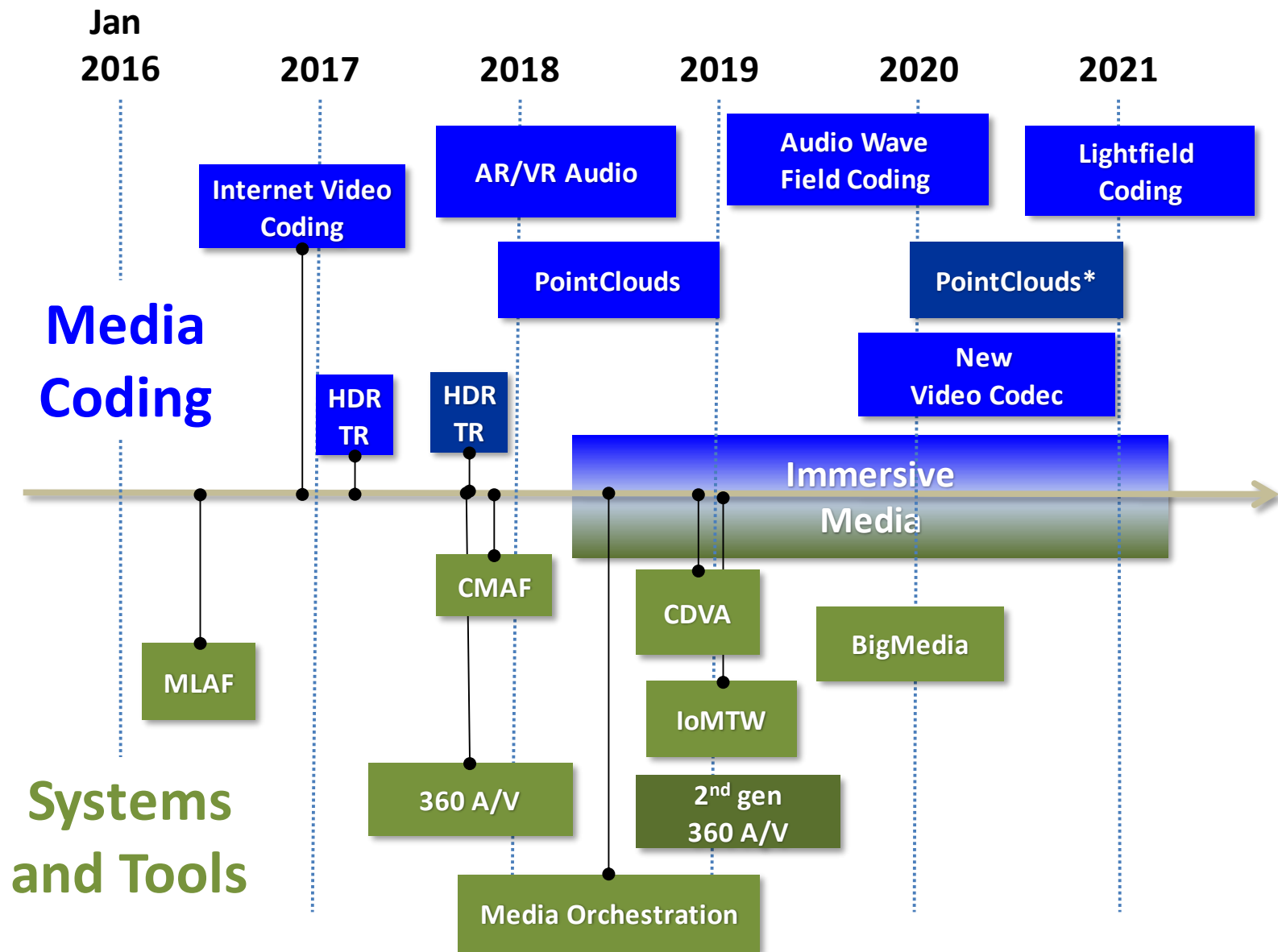- … and then an overview of all MPEG's standards

MPEG standards timeline

	1990	1995	2000	2005	2010	2015

Audio: MP1 L2, MP3, AAC, Surround, USAC, 3D Audio, SAOC, DRC

Video: Video, Video, SP, ASP, AVC, HEVC

Graphics: BIFS, AFX, OFF, ARAF

Media-related: MDS, CENC, CEL/MCO, CDVS, DID, MPEG-V, UD

Systems: PS/TS, MP4 FF, DASH, TT, MMT

Colour coding

MPEG-1	MPEG-2	MPEG-4	MPEG-7	MPEG-21
MPEG-A	MPEG-B	MPEG-C	MPEG-D	MPEG-H	MPEG-V

Significant Developments inform MPEG'S Roadmap

- The relentless increase of IP-distributed Media

- Mobile media, higher quality, more immersive formats (UHD, VR, AR)

- The Internet of Media Things & Wearables

- Big Media Data

- Cloud-based media processing, storage and delivery

Questions to MPEG's Customers

- Which **needs** do you see **for media standardisation**, between now and years out?

- What MPEG standardisation **roadmap** would best meet your needs?

- To accommodate your use cases, what should **MPEG's priorities** be for the delivery of specific standards? For example, do you urgently need something that may enable basic functionality now, or can you wait for a more optimal solution to be released later?