

MP22 Standardisation Roadmap

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Co-chair, MPEG Roadmap activity

Third Mini-Workshop on Immersive Live Experience (ILE)

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For an explanation of the (many) acronyms in this presentation, see
<https://mpeg.chiariglione.org/docs/mpeg-strategic-standardisation-roadmap>

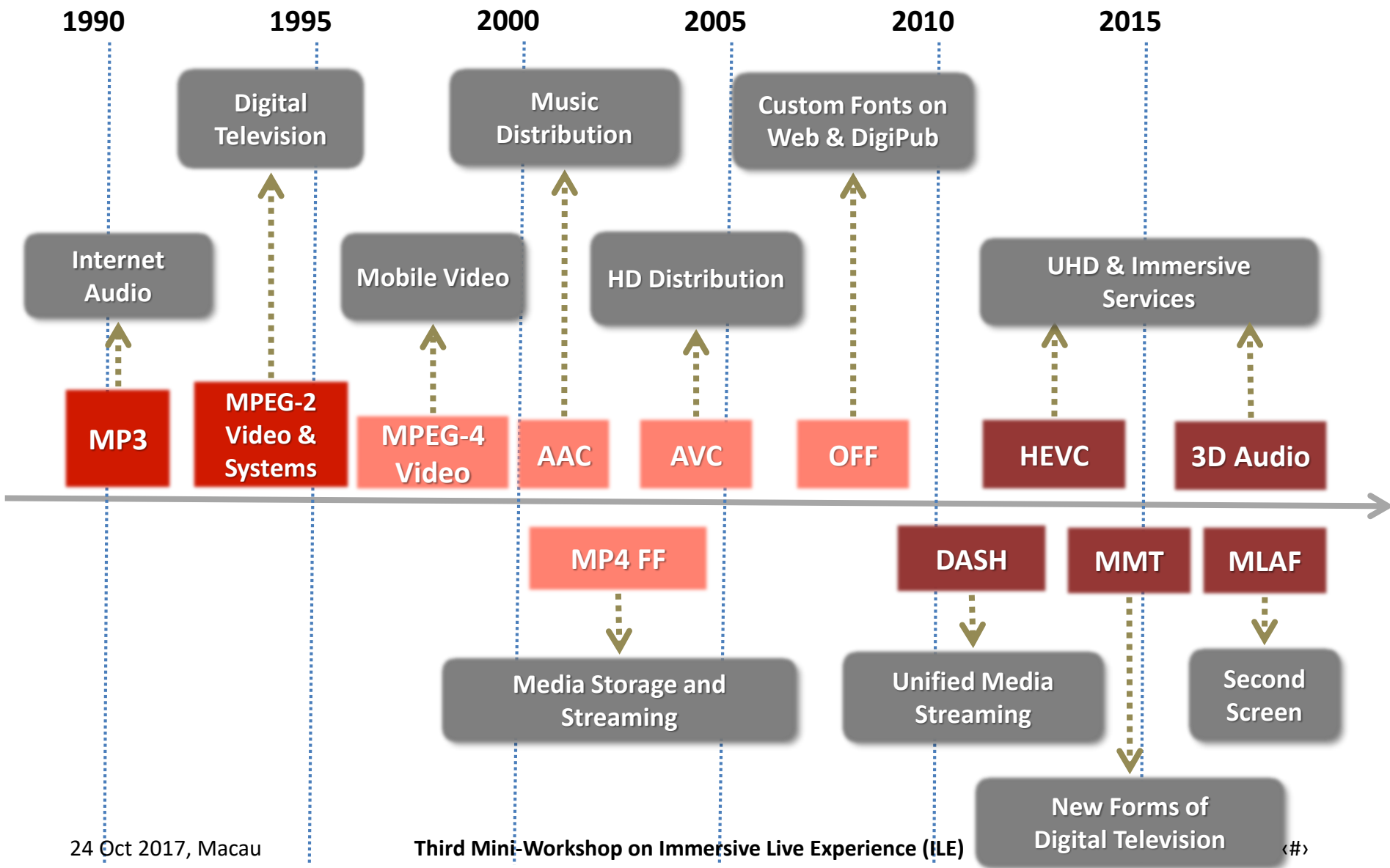
Why a Standardisation Roadmap?

- 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

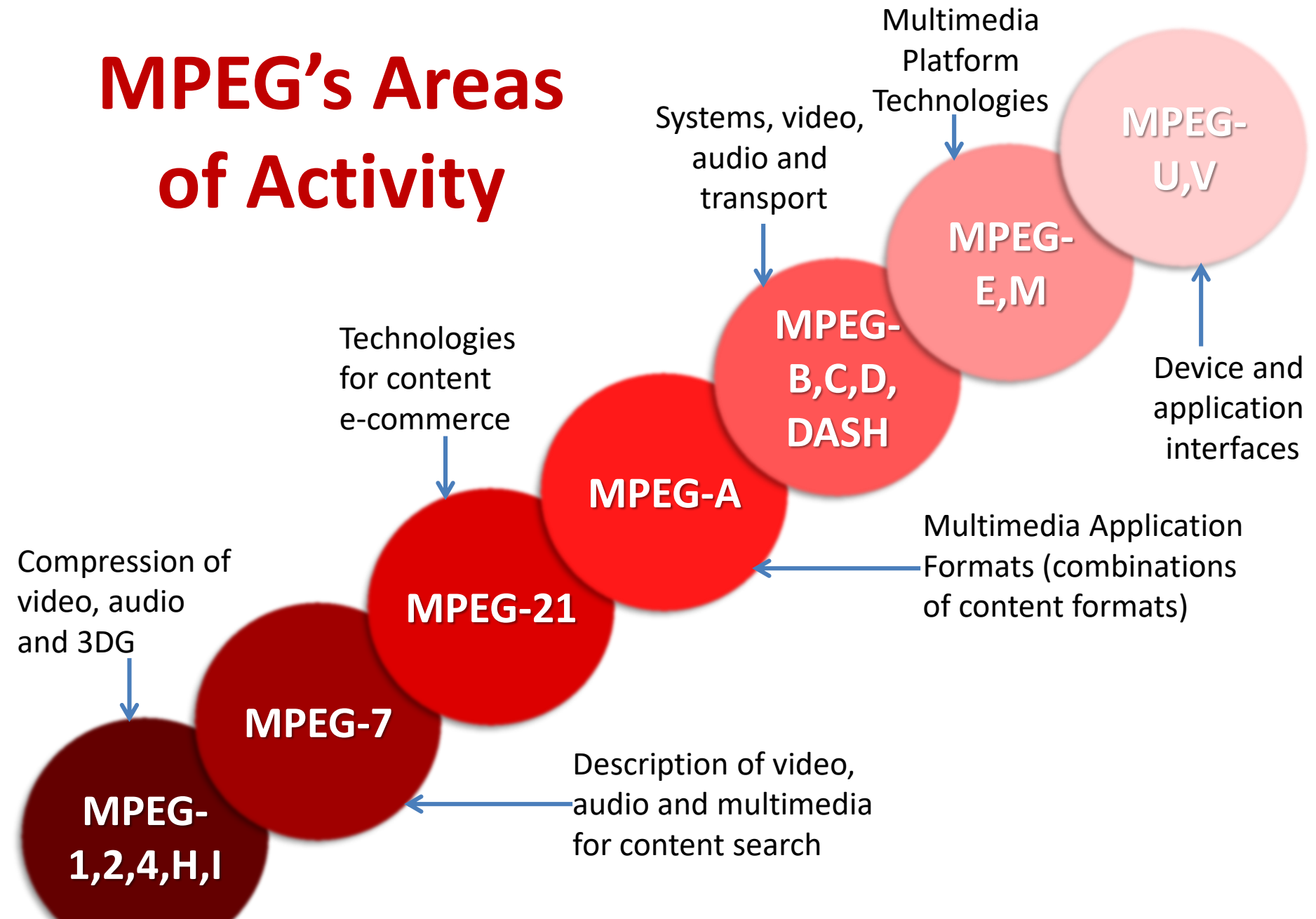
MPEG Standards



What is in the Roadmap

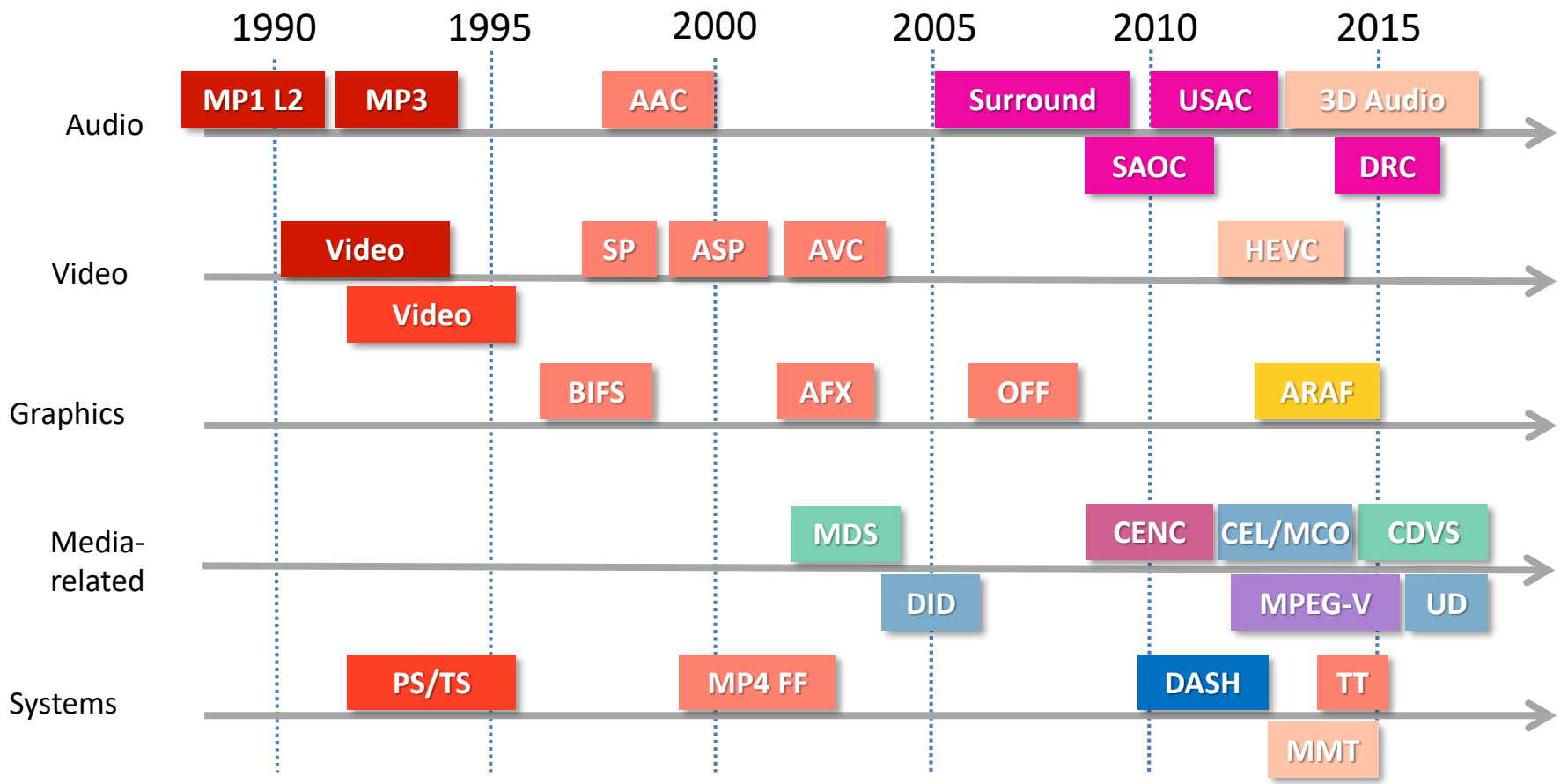
- Our roadmap is a short document.
- It briefly outlines MPEG's most important standards
- It then gives an overview of MPEG's activities

MPEG's Areas of Activity

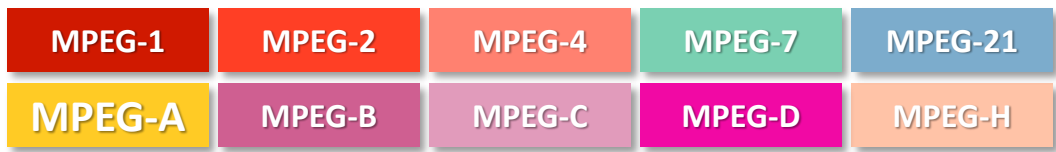


What is in the Roadmap

- Our roadmap is a short document.
- It briefly outlines MPEG's most important standards
- ... it then gives an overview of MPEG's activities
- ... and then an overview of all MPEG's standards

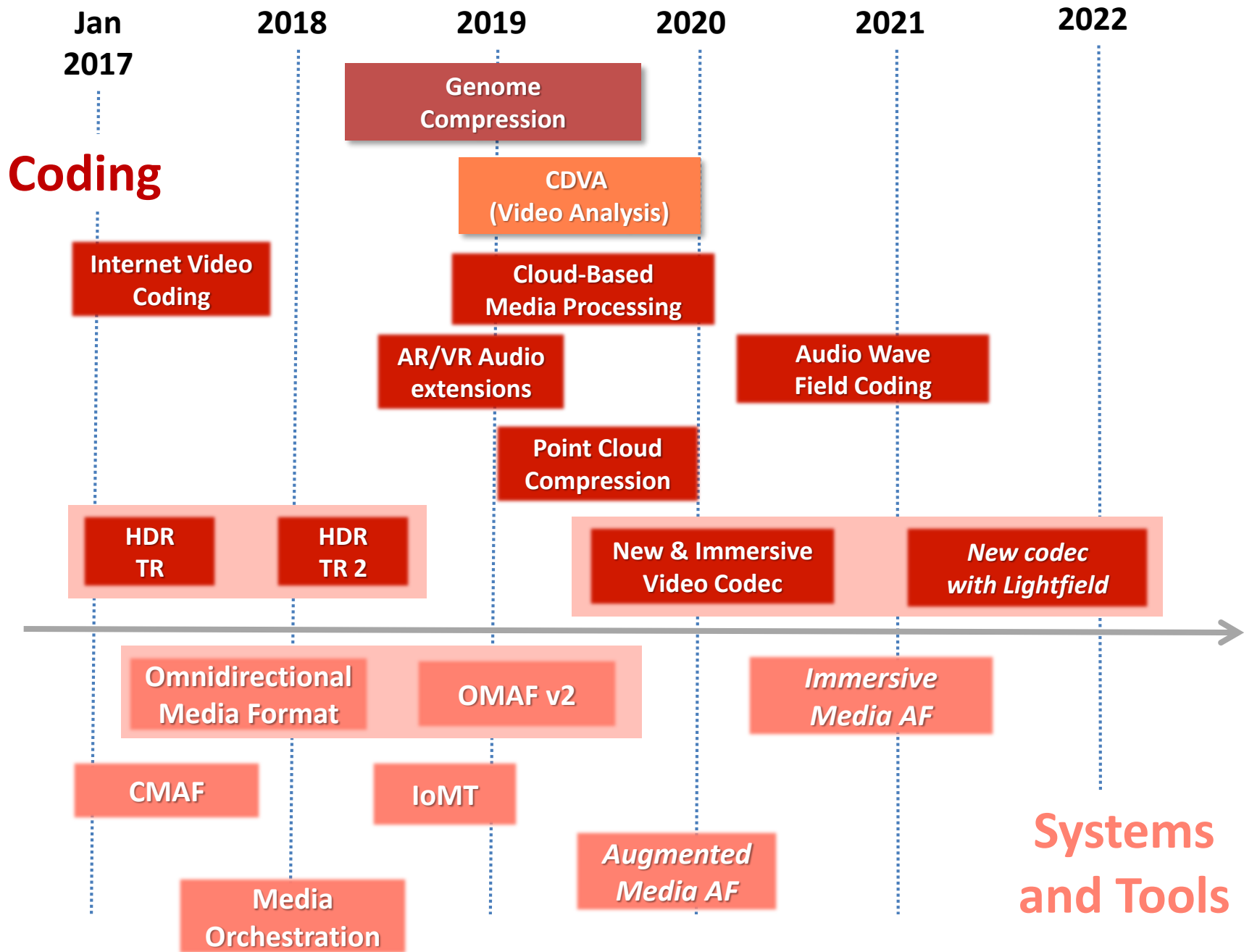


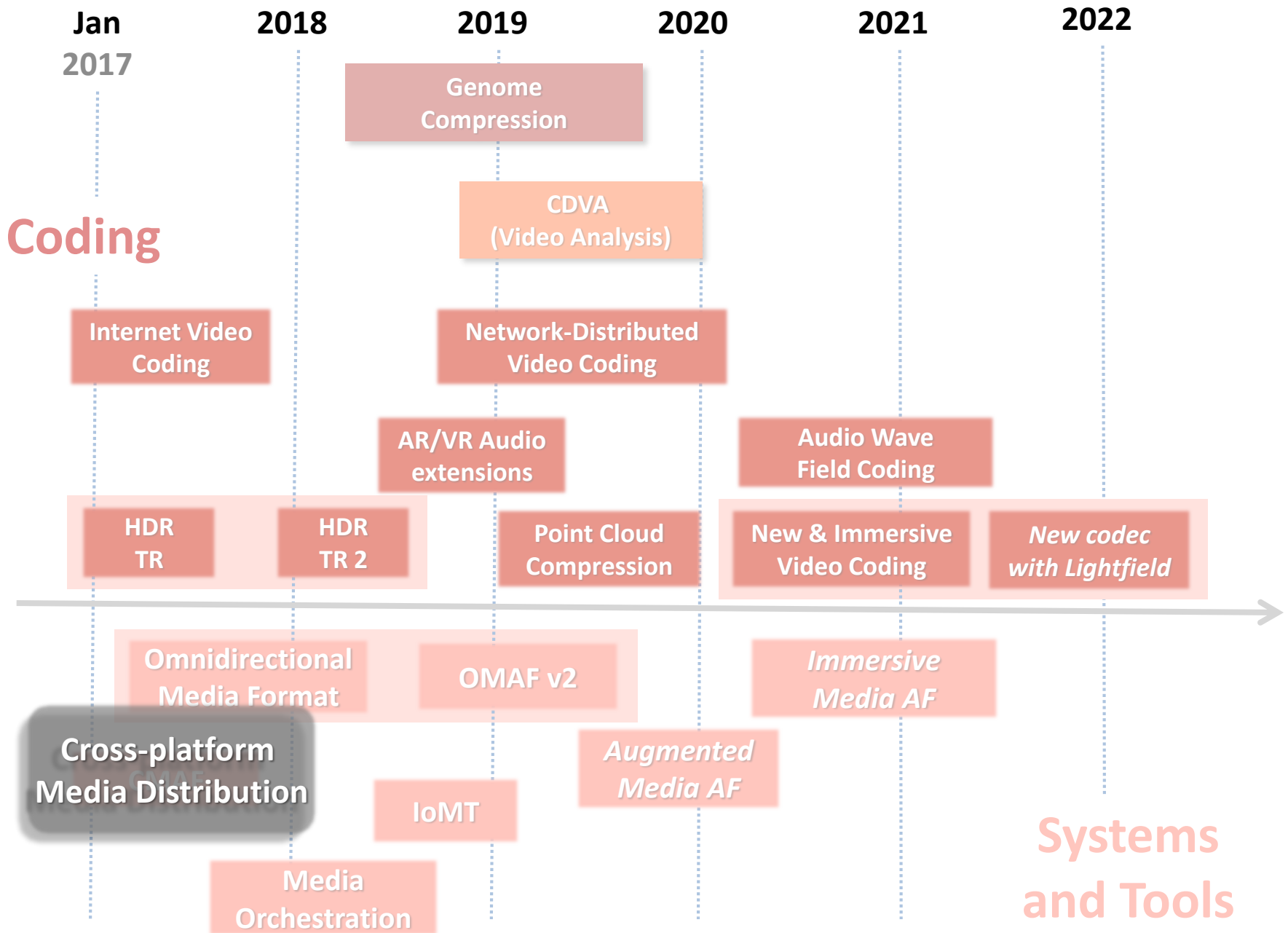
Colour coding



Significant Developments Shape MPEG's Roadmap

- The relentless increase of IP-distributed and Mobile media
- Higher quality
- More immersion media (UHD, VR, AR)
- The Internet of Media Things & Wearables
- Cloud-based media processing, storage and delivery





Jan
2017

2018

2019

2020

2021

2022

Genome
Compression

CDVA
(Video Analysis)

Coding

Internet Video
Coding

Network-Distributed
Video Coding

AR/VR Audio
extensions

Audio Wave
Field Coding

HDR
TR

HDR
TR 2

Point Cloud
Compression

New & Immersive
Video Coding

*New codec
with Lightfield*

Omnidirectional
Media Format

OMAF v2

*Immersive
Media AF*

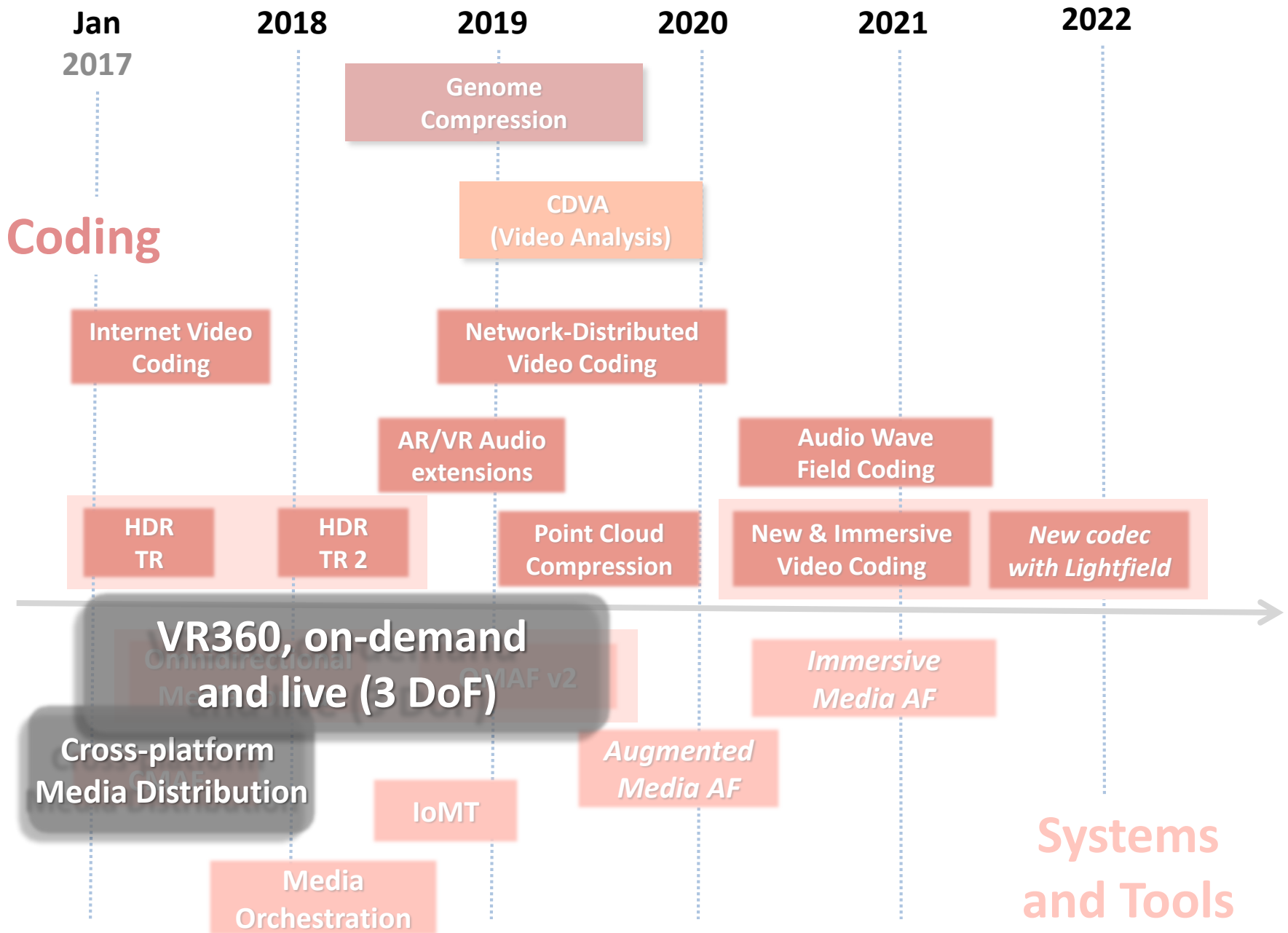
**Cross-platform
Media Distribution**

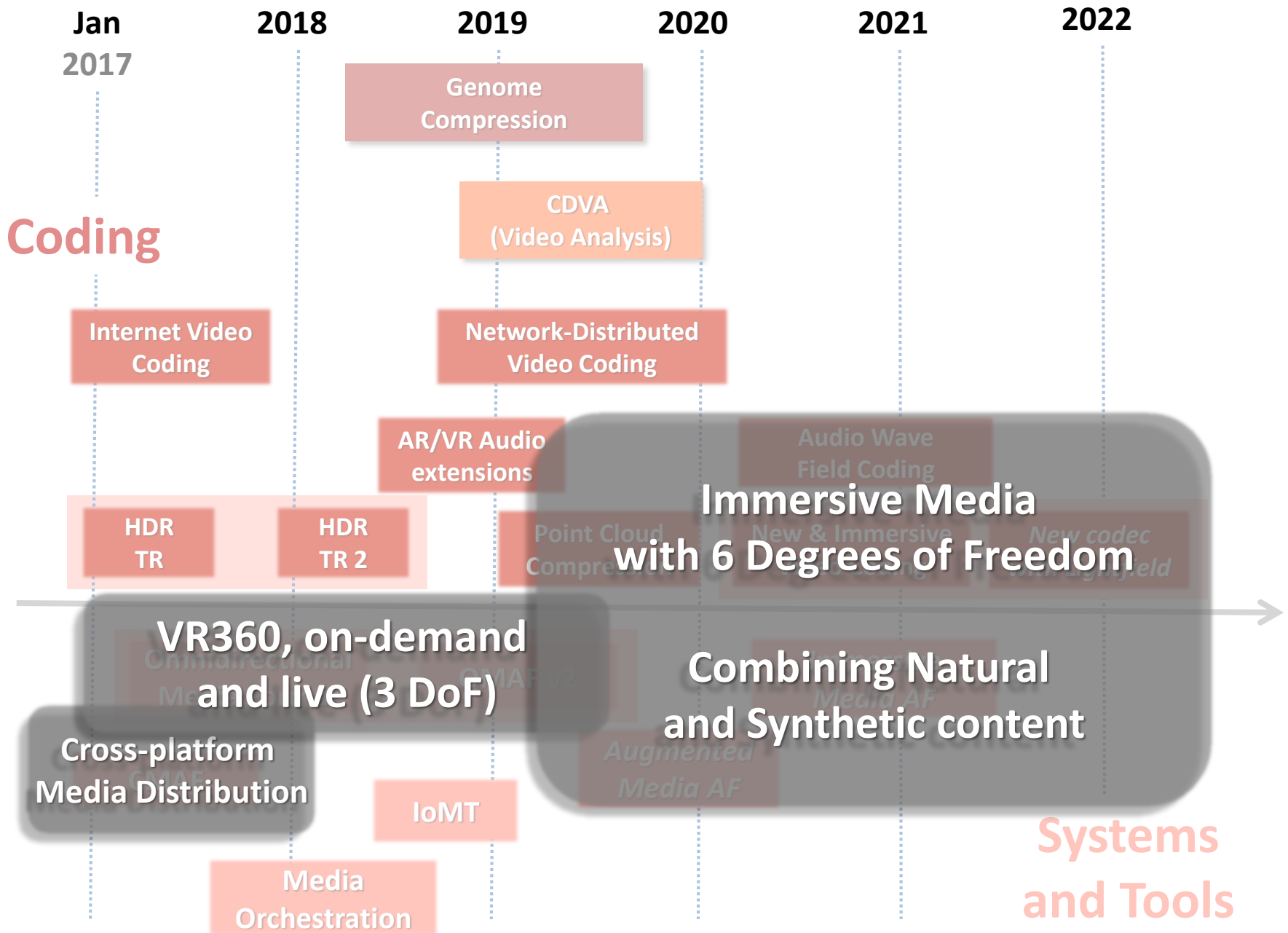
*Augmented
Media AF*

IoMT

Media
Orchestration

**Systems
and Tools**





MPEG-I

New MPEG project: ISO/IEC 23090 – Coded representation of immersive media

5 parts currently planned

1. Architectures
2. Omnidirectional Media AF
3. New & Immersive Video Coding
4. New & Immersive Audio Coding
5. Point Cloud Coding

Further considering:

6. Metadata for Immersive Services and Applications
7. Metrics for Immersive Services and Applications