MEC4FAIRFEST – Multi-Access Edge Computing for Fair Media Streaming Manifest

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Motivation

NWTOS

- Dynamic adaptation of media players in a distributed and uncoordinated way
- Each client strives to optimize its individual QoE

Media Service needs awareness of end-user device context and network conditions to optimize video experience

ETSI standard on **Multi-access Edge Computing** allows deploying application services at the edge of the mobile network

MEC4FAIRFEST

- Active component of the video delivery chain at the mobile edge

- Responsible for dynamically controlling HAS video representations available for delivery



Innovation

- Standard compliance
- Transparent, no impact on service,
- CDN infrastructure nor media player
- Compatible with **encrypted** media delivery
- Efficient, no overheads
- Highly **scalable**

WITHOUT PROXY

Higher initial buffering delay More frequent temporal interruptions or pauses More frequent video resolution changes Autonomous, Distributed and Unfair media experience

Market

- Video streaming technology providers for media services
- Telecom operators
- CDN operators
- Wireless networks vendors
- Dense event performances
 - WITH PROXY

Lower initial buffering delay Less frequent temporal interruptions or pauses

More stable video resolution Scalable, Coordinated and Fair media experience Vicomtech is an applied research centre specialized in Computer Graphics, Visual Computing and Multimedia technologies, founded in 2001 and based at San Sebastián Technology Park

Departments:

Digital Media

•Data Intelligence for Energy and Industrial Processes •Industry and Advanced Manufacturing •Intelligent transport systems and engineering •eHealth and Biomedical Applications





Use Cases

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Business Benefits

- simplify streaming media delivery
- **boost** prototyping
- overcome multiple stream synchronization to provide richer

experiences

- deliver low latency streams

Features

-streaming: RTP, RTSP, RTMP, HTTP, HLS, MPEG-DASH, WebRTC -H.264 MP, HEVC/H265, AAC-LC/HC -4K & UHD & HDR -iMX HW support -GPU coding Live multimedia sharing Accurate timestamp based apps Synchronization of multiple live stream Low latency Video calls Remote Surveillance Factory supervisory control and data acquisition (SCADA) display Virtual desktop infrastructure (VDI) Cloud Gaming for ultra-thin clients Efficient delivery Advanced advertising insertion Train / Bus entertainment systems

Second/Multi-screen apps

