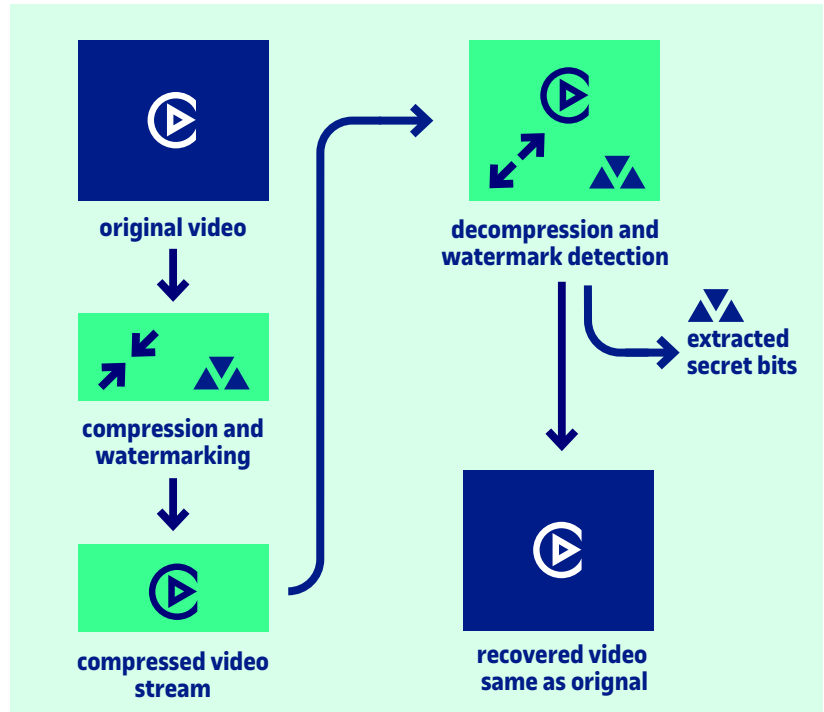# Is your Watermarking System reversible?

Our real-time solution secures the transmission and storage of multimedia content without altering the data transfer rate or the content seen by the viewer

Advantages

- **Total reversibility, since the original content can easily be restored**

- **Zero distortion of the media content**

- **More robustness, as the hidden stream is encrypted using several keys**

- **Real-time extraction processes, since only decoding procedures are required but not total decompression of the video**

- **Minimum alteration of the bit-rate**

- **Greater reliability, since the risk of losing the watermark due to compression is avoided**

original video

compression and watermarking

compressed video stream

decompression and watermark detection

extracted secret bits

recovered video same as orignal

Achieve a tradeoff between capacity, transparency and bitrate

Applications

Media Analytics
- Audience measurements and broadcasting monitoring.
- Measure of campaign effectiveness
- Consumer analytics on broadcasting, video-on-demand or even internet distribution

Media Advertising
- Connection of TV broadcasts with mobile apps to increase viewer engagement
- Synchronization of ads in real time on second screens when a program or ad is on air

Digital security
- Management of Digital Rights (DRM) on Video-on-demand or Music
- Another layer of security to detect counterfeiting and piracy
- Authentication and confirmation of genuine content

Inventors
David Megías and Mehdi Fallahpour researchers from the KISON research group at the Internet Interdisciplinary Institute (IN3)

Patents
PCT/EP2017/057426, Video Watermarking

Video
tinyurl.com/VideoWatermarking