# THEO Technologies
# High Efficiency Streaming Protocol (HESP)
# Infrastructure Scale-up
## Internship

*Leuven, Belgium (Europe)*

## THEO's vision & mission

THEOplayer is the industry-leading video playback partner for delivering a world-class viewer experience with HLS and MPEG-DASH across different platforms and devices. With our video player solutions for VR/360, web, mobile web, Android SDK, iOS SDK and Chromecast Receiver App SDK, THEOplayer is a trusted video player partner for some of the world's premier telcos, broadcasters and publishers. THEOplayer has proven compatibility with industry-leading solutions for streaming, advertising, DRM and server side ad insertion. Our worldwide customer base includes companies such as CNN, Telenet, NBC, Twitter, Swisscom, France Télévisions, Telia, CERN, Nasdaq, Hudl, Cisco and Softbank. In 2017, 2018 and 2019 THEOplayer has won the Streaming Media Readers' Choice Award for Best Video Player Solution/SDK. THEO Technologies is one of the fastest growing technology companies in Belgium. We are an ambitious team who have been disrupting the global online video industry since 2012. THEO Technologies has offices in Leuven (HQ - Belgium), Singapore (Singapore), New York and San Francisco (USA).

With video streaming on the rise, video player solutions face a growing need for an efficient and scalable approach which is adaptable to variable network conditions. Viewers are becoming increasingly demanding when it comes to streaming online video, as latencies and zapping times are expected to be as low as in classic (or even analogue) technologies. Moreover the approach needs to be scalable, efficient and tolerant to different network conditions. Existing streaming does not meet all of these requirements. Either the techniques are not sufficiently scalable (such as webRTC), either the latencies and zapping times are too high (as with HLS and MPEG-DASH). THEO Technologies designed a streaming protocol that combines the scalability of HTTP Adaptive Streaming technologies such as HLS with sub second latency and zapping times. This new protocol is called HESP – High Efficiency Streaming Protocol.

## Description internship

This internship focuses on improving the scale of the current reference setup. The existing reference setup is hosted in AWS but is not designed for scale. It is not designed to accommodate a large number of video channels and a large number of users in different geographical areas. The purpose of this internship is to **increase the number of video channels as well as the number of concurrent users that the reference setup can handle**.

The trainee will first get acquainted with the HESP protocol and with the reference implementation. Next the reference implementation will be improved. During the internship, the trainee will learn how streaming video works and how streaming players work. The trainee will learn how to develop in an AWS cloud environment and how to increase scalability in an AWS cloud environment.

## Does this sound interesting to you?

Please send your resume and cover letter to **careers@theoplayer.com**. We look forward to hearing from you.