



# European Parliament Case Study

## Summary

In 2003, the European Parliament selected Belgacom as the Internet streaming service provider to broadcast parliamentary sessions and meetings throughout the European Union (EU) via the Internet. Belgacom is a key European player in the domain of telephony, mobile communications, broadband data and Internet streaming services.

Belgacom chose Helix™ Universal Server from Real® to broadcast digital media content for the European Parliament due to its superior reliability and flexibility.

## Introduction

The European Parliament meets in Brussels and Strasbourg to scrutinize proposals for new EU laws. The European Parliament has 732 Members representing the twenty-five member states of the EU.

In addition to their growing role as legislators, members approve the appointment of the European Commission, decide the EU budget with the member states, monitor spending, approve international agreements and question EU Commissioners and National Ministers.

Citizens have the right to petition the European Parliament, therefore ready public access to parliamentary sessions and information is important.

To this end, the Audiovisual Division of the European Parliament was established to provide:

- Recordings of Parliamentary sessions and meetings
- A television studio, equipped with 4 cameras, for production of live and on demand talk shows and interviews
- News editing suites
- Coverage and images of current events and subjects relating to the European Parliament

## The Need

To enable the European Parliament to deliver their content in a cost-effective way to the citizens of the European Union, the Audiovisual Division issued an invitation to bid for an Internet streaming service.

Three fundamental criteria for the service were identified:

- The streaming service must be simple to use
- The streaming content must be available free to European citizens
- The streaming service must enable the same access for all citizens throughout the EU

In other words, all European citizens should be able to access the European Parliament's streaming service and enjoy the same level of quality throughout the European Union.

After the official call for bids, Belgacom was awarded the contract.

Belgacom thus set out to provide the following services to the European Parliament:

- Encoding audio-visual sources supplied by the European Parliament into a streaming format in 23 languages
- Delivery of the encoded signals to the Belgacom host servers

- All digital media hosting; uniform dissemination of the content in a streaming format throughout the European Union and around the world
- Implementation and management of the entire service, particularly provision of statistics concerning users

## The Solution

To achieve the greatest reach to the most European citizens and viewers world wide, Belgacom decided to encode the audio and video content for the European Parliament in Real Media® and Windows Media. In this way, the audio and video content is accessible to viewers regardless of which media player is installed on their operating system.

However, Belgacom soon discovered that Real Media has a distinct advantage over the other formats due to significant features:

- “Wall clocking” enables Belgacom to split the encoded audio and video signals into separate streams and synchronize them in the customer’s RealPlayer® using Synchronized Multimedia Integration Language (SMIL). This technique significantly reduces the cost of bandwidth and encoding hardware.
- Helix Universal Server – Proxy allows Belgacom to scale the content distribution by transmitting content from an upstream origin server at the European Parliament to the hosting servers at the Belgacom Datacenter.
- “Always on” reliability is assured by running multiple boxes with Helix Universal Server and RealProducer®. Here, both the primary and backup encoders send streams to multiple advanced servers. Under normal conditions, each server gets a version of a live Real Media file. If there is a failure in the primary stream, the Helix Universal Server automatically switches to the backup stream, and the end user will not notice any interruption.
- The same viewing experience is achieved for the live stream on the Internet as for the real-time broadcast that is shown on the television screens in the European Parliament. During a parliamentary session, information about the topic, speaker, political party, etc. is projected. The RealPlayer also displays this information in real time with the streaming video for the online audience.

## The Deployment

All the streaming is hosted at the Belgacom Datacenter on a fully redundant and load-balanced streaming platform that can support Real Media and Windows Media. The Real platform consists of four Helix Universal Servers – Advanced receiving their information from the Helix Universal Server – Proxy. A complete end-to-end monitoring system has also been set up, which allows them to monitor the full streaming process.

Belgacom used the RealProducer SDK to create custom software that directly encodes European Parliamentary sessions into a single RealVideo stream with 23 different RealAudio files for each of the European Parliament’s official languages. Belgacom uses wall clocking to synchronize the different audio and video streams. Just one staff member is required to create the content and monitor the system. The entire system is duplicated with a redundant backup. In the rare case of a system failure in encoding or broadcasting, the Real software automatically fails over to the redundant system without any interruption to the viewing experience.

## Mission Accomplished

For over a year now, Belgacom has successfully broadcast for the European Parliament a number live sessions and meetings to hundreds of viewers worldwide. The infrastructure Belgacom has developed is prepared to accommodate 24x7 coverage to meet the needs of the European Parliament should the need arise. The successes to date portend future Internet streaming broadcasts for the citizens of Europe as well as interested viewers worldwide.





## About Belgacom

With its registered office in Brussels, Belgacom NV/SA is the leading supplier of global telecommunications solutions on the Belgian market. Belgacom Network & System Integration offers companies total solutions in the fields of WAN, LAN and advanced data technology, including management these integration projects from conception to service delivery. The streaming services within this division are organized around three competences, streaming hosting, streaming projects and streaming research lab.

To learn more about Belgacom Network & System Integration please visit [www.belgacom.be/nsi](http://www.belgacom.be/nsi).

## About Real

Real is the global leader in digital media delivery. Real develops and markets software products and services designed to enable users of personal computers and other consumer electronic devices to send and receive audio, video and other multimedia services using the Web.

## Contact Real Today

Discover how the Helix Universal Media Server from Real can help your organization simplify its streaming infrastructure, reduce costs and deliver a more reliable product. Visit us at [www.realnetworks.com](http://www.realnetworks.com) or contact a sales representative at **1-800-444-8011**.