

Satellite delivery of 3D television

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ESA is taking a practical step forward in the ultimate television viewer experience: satellite-delivered 3D television at home. Through the Advanced Research in Telecommunications Systems (ARTES) programme and the project 'Stereoscopic Broadcasting', ESA is providing its support to the companies OpenSky and SkyLogic in the provision of a complete service offering for consumer-oriented 3D television broadcasting. Credits: ESA

(PhysOrg.com) -- As part of its Advanced Research in Telecommunications Systems programme, ESA is taking a practical step towards a new viewing experience: 3D television at home, delivered by satellite.

3D televisions and standard reception equipment are being set up at selected sites in Europe. Transmission of a continuous 3D channel began on 12 March 2009. The channel offers a range of programme lengths and material, including sport, a short film and trailers, and events filmed

in live 3D will be added.

The 'Stereoscopic Broadcasting' project, is conducted under the Advanced Research in Telecommunications Systems (ARTES) programme within ESA's Directorate of Telecommunications and Integrated Applications and is supporting European industry in the development and deployment of the system.

Two types of reception sites are being created: one mimics a home environment using longer content, while the other is a public venue with shorter content. A 'home site' has been set up at ESTEC, ESA's research and technology centre in Noordwijk, the Netherlands.

The 3D channel is being transmitted from Eurobird 9A, located at 9°E, on 11 747 MHz with horizontal [polarisation](#) and a symbol rate of 27 500. Videos are transmitted in a modified side-by-side arrangement. To view them, a 3D-capable television and appropriate glasses are required.

Since the first broadcasts in the 1920s by Scottish engineer John Logie Baird - the first person to produce a live, moving, television image from reflected light - broadcasting and viewing have been continually improved. In 2008 there were more than 100 million European homes receiving TV programmes transmitted by satellites, either by direct reception or through cable distribution systems.

Viewers have enjoyed the arrival of High Definition (HD), surround-sound and both widescreen and flatscreen televisions, all aimed at enhancing the user experience. Many of these developments were the result of technical advances pioneered in the cinema. This trend continues with a recent crop of high-quality 3D productions being released in cinemas, which have whetted the appetite of the viewing public.

ESA is supporting OpenSky and Skylogic in the delivery of 3D television into viewers' homes.

The project objectives include: setting up a complete end-to-end chain for satellite 3D TV broadcasting; viable consumer 3D TV products; producing 3D content and delivering 3D events for the on-air pilot trial; setting up reception sites to gather consumer feedback.

More information:

Stereoscopic Broadcasting: [telecom.esa.int/telecom/www/ob ...
.cfm?fobjectid=29445](http://telecom.esa.int/telecom/www/ob....cfm?fobjectid=29445)

3D@SAT: [telecom.esa.int/telecom/www/obcfm?fobjectid=29981](http://telecom.esa.int/telecom/www/ob....cfm?fobjectid=29981)

Provided by European Space Agency ([news](#) : [web](#))

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