Stelios - Ku-band Microterminal for Multicasting

Start-up Initiative



"We believe the micro-terminal opens up exciting new markets and opportunities for satellite multicasting and can make use of older satellites in inclined orbits." Kevin Hodson, Director, Delta Communication Ltd.

Dolta Communication Ltd



Prime Contractor:



Prime Contractor:	Delta Communication Ltd. 2-4 West Street Ilkley United Kingdom LS29 9DW http://www.deltacomm.co.uk
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Project Partners:	dB Technology Ltd. (United Kingdom)

Profile:

The project is developing a Ku-band micro-terminal for the reception of satellite multicast services. The micro-terminal, which has an antenna aperture of about 400 cm², combines spread-spectrum modulation and forward error coding with the use of near-end-of-life satellites, thereby allowing cost-effective transmission at medium data rates. The terminals can be used in a wide range of static, mobile and portable environments.

One proposed application is a service that supports IP multicasting for dynamic advertising using video clips as well as information services for the transport industry. Components of the proposed system are a web server, a carousel processor, a hub station and any number of micro-terminals linked to intelligent plasma-screen displays to play out the video clips or text-only displays for simpler information. Using content entered either from CD or over the Internet, the web server generates a carousel of clips or text information and transmits them to the micro-terminal in advance of their play-out times according to the required schedule.

With its integrated antenna, LNB and demodulator that is connected directly to a LAN with Ethernet output, the micro-terminal lies at the heart of the system and enables installation of receivers in locations where larger antennas would be impractical. The micro-terminal is easy to point and can be set-up via its own built-in web server.

The project consortium is working closely with SES Astra based in Luxembourg on the ideas behind the current initiative and has formed a new company called KuCast Ltd. to exploit the commercial opportunities of the micro-terminal.



Telecommunications Satellite Applications

http://telecom.esa.int/stelios