

## **SES AND RUTGERS UNIVERSITY TEST SATELLITE CONTENT DELIVERY NETWORK FOR STREAMING, OTT, AND 5G**

### SATELLITE GAINING TRACTION AS CDN CAPABLE OF MEETING STREAMING DEMAND

LUXEMBOURG, 18 April 2016 -- SES S.A. (NYSE Euronext Paris and Luxembourg Stock Exchange: SESG) announced today the first phase of content delivery network (CDN) development at Rutgers University's School of Engineering to demonstrate and measure the effectiveness of SES's CDN overlay solution in meeting the growing demand for streaming over-the-top (OTT) video.

Conducted at the highly acclaimed Wireless Information Network Lab (WINLAB) at Rutgers University, the initial demonstrations will involve satellite for both linear and on-demand OTT content delivery to multiple devices and platforms within the ORBIT (Open-Access Research Testbed for Next-Generation Wireless Networks) and GENI (Global Environment for Network Innovations) wireless test beds at WINLAB. A national demonstration of the satellite-based CDN will make up the second phase of the project, through a collaborative effort involving other universities and their network test beds across the U.S.

SES enables programmers to reach more than 100 million U.S. television households through virtually every cable TV, IPTV and direct-to-home provider, positioning SES to accompany media and entertainment companies into the realm of OTT. By delivering and caching OTT content across these distribution points, SES can help television networks, content producers, and cable and wireless providers meet escalating OTT demand with the reliability and scalability of traditional broadcast television. Rutgers researchers will also be looking at applying the strengths of satellite in support of future networks, including an essential role in the development and deployment of 5G.

"As demand for streaming linear and on-demand content bogs down terrestrial networks, satellite's inherent point-to-multipoint and multicast capabilities make it the ideal content delivery network for OTT," explained Steve Corda, Vice President, Business Development North America for SES. "The demonstrations at Rutgers University's WINLAB are designed to compare the scalability and reliability of a satellite-based CDN with terrestrial networks," Corda observed, noting that the satellite CDN will become an indistinguishable part of the Internet and a critical differentiator in OTT delivery. "Typically, most OTT video viewers watch a small percentage of the overall available content, which we believe makes satellite a very attractive CDN choice," Corda said. "The activity with WINLAB will explore intelligent content caching and routing to determine when it makes sense to deliver over-the-top video via satellite or terrestrially, and when to cache that content at the network edge."

"The integration of satellite multicast capabilities into a content delivery network offers an important new delivery mechanism to OTT content providers," said Dr. Dipankar Raychaudhuri, a professor of electrical and computer engineering and the WINLAB director at Rutgers University. "Working with the world's leading satellite operator, SES, we look forward to exploring the potential benefits of satellite distribution options for next-generation content delivery networks."



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## **About SES**

SES (NYSE Euronext Paris and Luxembourg Stock Exchange: SESE) is a world-leading satellite operator with a fleet of more than 50 geostationary satellites. The company provides satellite communications services to broadcasters, content and internet service providers, mobile and fixed network operators and business and governmental organisations worldwide.

SES stands for long-lasting business relationships, high-quality service and excellence in the satellite industry. The culturally diverse regional teams of SES are located around the globe and work closely with customers to meet their specific satellite bandwidth and service requirements.

SES holds a participation in O3b Networks, a next generation satellite network combining the reach of satellite with the speed of fibre.

Further information available at: [www.ses.com](http://www.ses.com).

## **About Rutgers School of Engineering and WINLAB**

Established in 1864, the School of Engineering at Rutgers, The State University of New Jersey, is home to educational opportunity and innovation, pursuing work of enormous relevance to society and the economy through world-class research and important industry partnerships. With seven academic departments representing key engineering disciplines, world-renowned faculty, and groundbreaking research centers, the School of Engineering currently enrolls approximately 4,600 undergraduate and graduate students, including doctoral students, and generates more than \$60 million in research expenditures annually.

WINLAB was founded at Rutgers in 1989. A collaborative industry and university research center, its mission is to advance the development of wireless networking technology by combining the resources of government, industry and academia. The center's educational mission is to train the next generation of wireless technologists via graduate research programs that are relevant to industry.