

Reach audiences on multiple devices

SES White Paper
April 2014

Satellite proven most powerful gateway to deliver content and connectivity throughout the home. SES plays an integral role in helping broadcasters reach multiple screens.

Consumers today are eager to be entertained and be online wherever they are, at any time of day. Across the globe, there is a growing trend to consume news and entertainment across an ever increasing range of consumer electronic devices, including laptops, tablets, personal media players, smartphones, as well as the high-spec high definition TV set in the living room.

Research conducted on behalf of SES by IHS Screen Digest shows just how many more connected devices are now being used in the household. The research shows that in 2008 there were on average 2.2 connected devices per household in developed markets, and this number is projected to grow to 6.5 by 2017.

The predictions for growth of connected devices in emerging markets are even more dramatic. In 2008, the per-household average was 0.5, and this is set to rise to 3.5 connected devices in 2017.

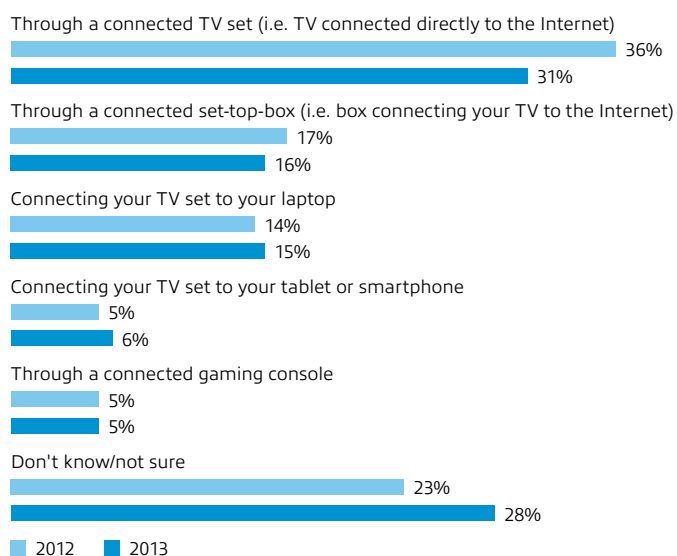


Delivery to multiple screens has become something consumers expect

Accenture's Video Solutions Survey 2013 demonstrates that consumers are becoming increasingly sophisticated in their diverse viewing habits. Patterns are emerging regarding which kinds of content are being watched on different IP enabled devices.

Full-length movies and series and live content are most consistently watched on the home's TV set, while user-generated content and video clips are more often watched on mobile devices.

PREFERRED ACCESS FOR "VIDEO OVER THE INTERNET SERVICE" ON TV SCREEN



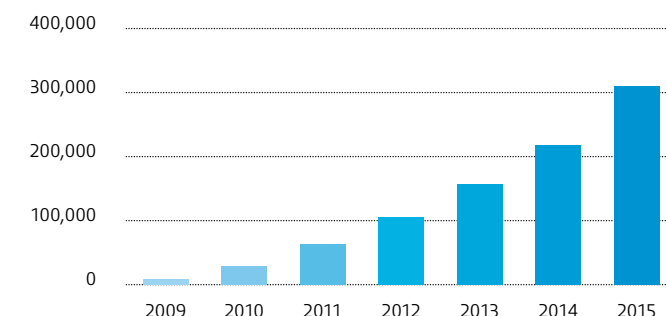
Source: Accenture Video Solutions Survey 2013

The TV set remains at the heart of household viewing of live sports and news. Figure 4 shows that TV sets saw the highest growth for live viewing from 2012 to 2013.

However, full-length movies and TV series were enjoyed on PCs/laptops more often in 2013 (47%) than in 2012 (41%), whereas mobile phones including smartphones were more frequently used to view short video clips.

But people have most enthusiastically embraced tablets, which showed marked growth in viewing habits for all types of online video. These devices seem to have changed the way people think about consuming content. Viewing of full length movies and TV series on a tablet grew from 27% in 2012 to 33% in 2013. Watching user-generated content on a tablet grew from 46% in 2012 to 51% in 2013.

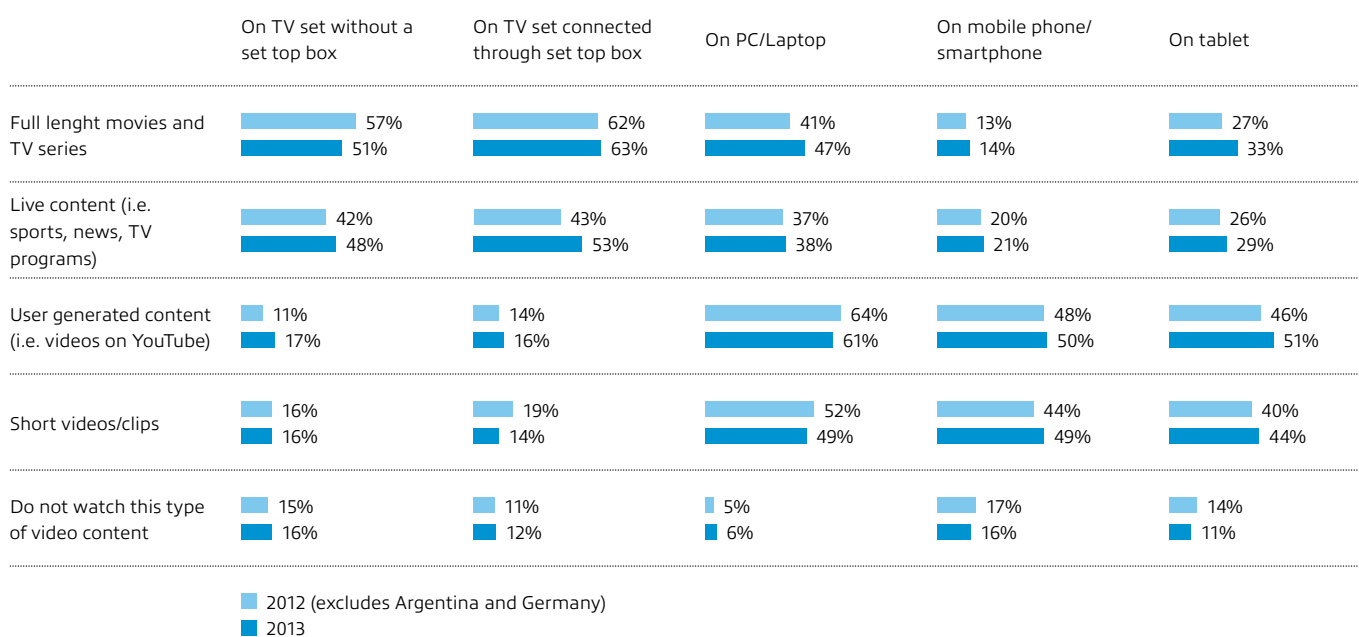
WORLDWIDE FORECAST OF MULTISCREEN DEVICES ACTIVE ON PAY-TV NETWORKS (THOUSANDS OF UNITS)



Source: IHS Screen Digest April 2012

CONSUMPTION OF VARIOUS CONTENT BY DEVICE TYPE

What type of video content do you usually watch over the internet on each of the following devices?



Source: Accenture Video Solutions Survey 2013

Communicating in a direct relationship with consumers even when they are not in front of their TV sets is the best way to engage new viewers, keep them loyal and monetise expensive investments in programme acquisition and content making.

Connecting with audiences for more hours of the day promotes brand 'stickiness', and affords the broadcaster myriad new marketing and revenue opportunities, such as

programme cross-promotion and creatively packaged cross-device offers.

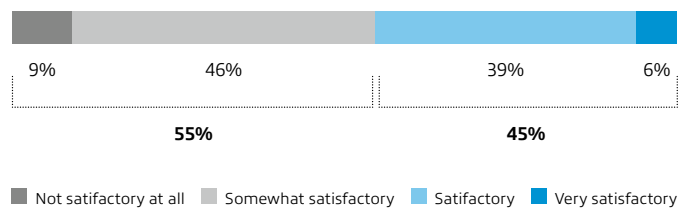
To successfully achieve this nirvana of enhanced, extended bonding with viewers, many different kinds of content need to be produced, formatted and seamlessly delivered so as to be viewed on screens of all sizes, and often involving many different technology standards and networking technologies. And the picture and sound quality, service reliability, look



and feel, must all be smooth and harmonious – the viewer experience must be excellent, always.

Broadcasters clearly still have some way to go to achieve this goal. According to the Accenture survey, when asked to rate the consistency and quality of experience when accessing video services across devices, only 45% of consumers indicated they are satisfied (see illustration on the right).

CONSUMPTION OF VARIOUS CONTENT BY DEVICE TYPE



Source: Accenture Video Solutions Survey 2013

Coaxial cable is not the ideal solution for carrying video

SES understands the complex challenges faced by broadcasters who need to deliver their rich content to multiple devices in the home. The purveyors of today's TV offerings need to ensure that the viewer experience is of the highest possible quality, regardless of the location in the home where the content is being consumed, and the device it is being consumed on, whether tablet, laptop, smartphone, games console, personal media player or the high spec HD set in the living room.

And there are many important contributory factors that can be beyond a broadcaster's control. Picture quality in a broadband environment is not a guaranteed thing. Transmission of the high-quality programming, including live TV, that consumers want, and distributing it around the home to multifarious devices requires a lot of bandwidth – and it has to be reliable, of the right signal quality, as well as carried over infrastructure that is robust enough, in order to keep consumers happy.

The problem the broadcaster faces is how to seamlessly deliver video content to a range of different devices, located throughout the home, whose only common feature is an IP connection. Making the viewer experience high-quality and harmonious even when content is being watched on devices not originally designed for this purpose is a major, and complex, challenge.

SAT>IP is the solution to reach viewers anywhere in the home – on any device

By leveraging their world-class state-of-the-art satellite fleet, worldwide terrestrial resources, and industry standard-setting expertise, and also employing reliable and robust complementary technologies such as Internet Protocol (IP), SES developed the SAT>IP communications protocol.

SAT>IP is a standard that solves the problem of how to get content disseminated throughout the home to the multiple devices being used – critically, without overloading the internal broadband network, and ensuring that there is no diminishment in picture quality.

The problems of buffering and poor picture quality severely threaten the likelihood of a great viewing experience.

SAT>IP BENEFITS FOR CONSUMERS

- Content can be delivered simultaneously to up to 8 different IP-enabled devices
- Crystal clear picture quality is guaranteed on every screen
- Content available throughout the home with no need for an internet connection

SAT>IP BENEFITS FOR BROADCASTERS

- Increased linear TV viewing – more hours engaging with viewers
- Multiple feeds increasing 'opportunity to view'
- Potential integration with OTT services
- No contention issues

SAT>IP also leverages the main benefits of satellite broadcasting. Satellites can deliver high quality bandwidth-hungry services directly to millions of homes simultaneously and reliably.

With no contention issue SAT>IP can cover any number of homes – delivering a service that is of consistently high quality – without loss of signal or need for additional infrastructure. So even people living in the most remote areas can 'light-up' all devices with TV services – without ever needing to wonder or care whether their broadband, if they have it, can cope.

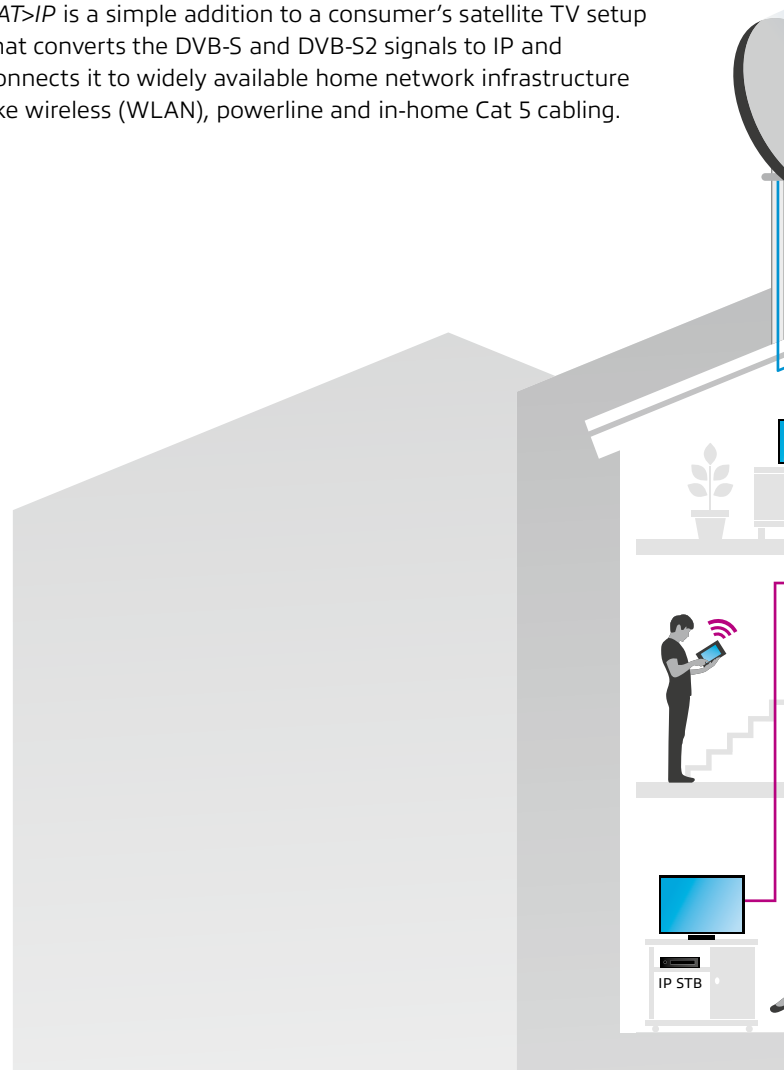
SAT>IP is the bandwidth-efficient way to seamlessly deliver content around the home

SAT>IP is a true plug-and-play solution to help broadcasters reach every room of the house, with high quality TV that is not dependent on the location of the nearest DSLAM – or how far away the home is from the local telecom switch – or the quality of the copper, co-ax or fibre lying underground.

SAT>IP relies on tried and trusted technologies – SES' high capacity, highly reliable satellite fleet and globally accepted IP networking.

SAT>IP enables live satellite programming to transmit over IP networks, in their highest quality, transparently and without transcoding, to any modern multimedia IP device– a unique selling proposition that no other alternative network technology can provide today.

SAT>IP is a simple addition to a consumer's satellite TV setup that converts the DVB-S and DVB-S2 signals to IP and connects it to widely available home network infrastructure like wireless (WLAN), powerline and in-home Cat 5 cabling.



SES and partnerships

SES has always been at the forefront of innovation and continues to develop a roadmap for future development which it is always willing to share with customers, partners, content creators, as well as regulators and governmental entities around the world.

SES Industry Days, an annual industry event hosted by SES further demonstrates SES' thought leadership and commitment to information sharing, co-operation and

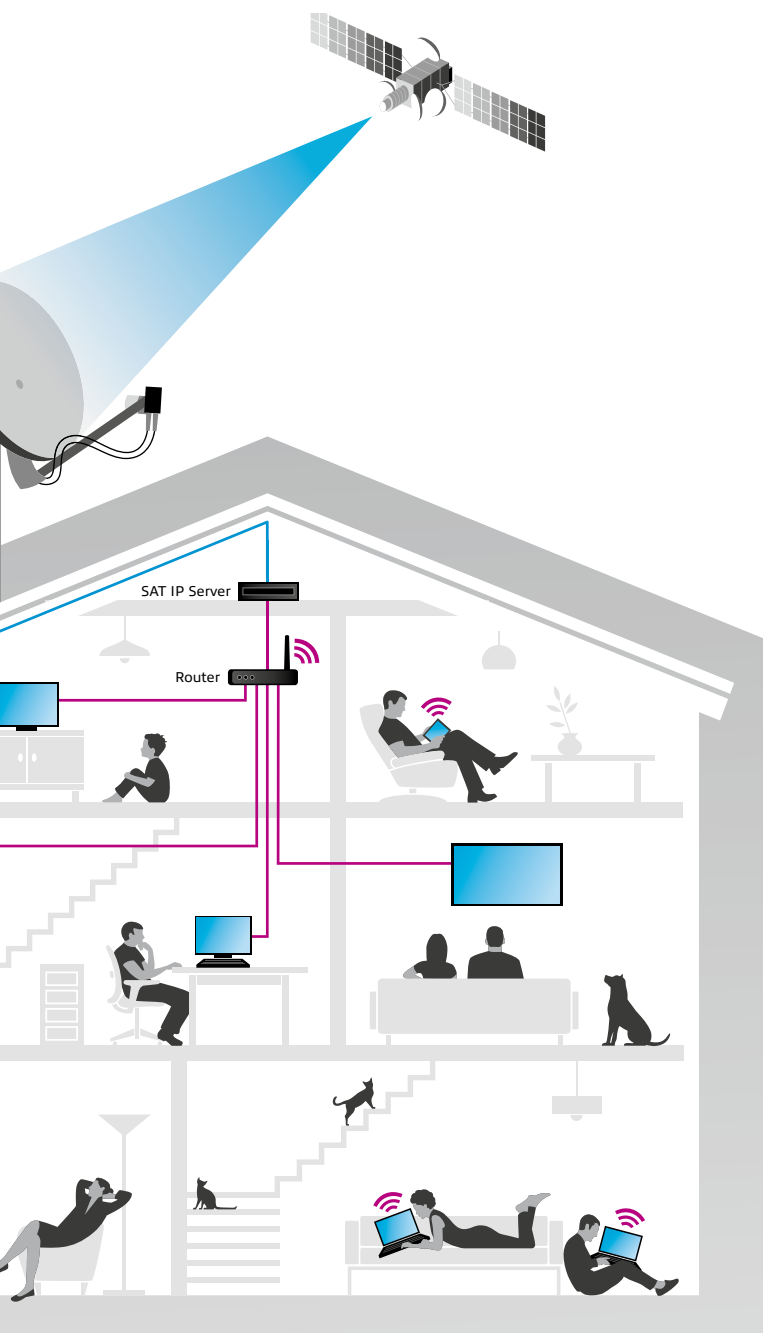
innovation. Taking place at the Chamber of Commerce in Luxembourg, SES Industry Days gathers industry partners and customers of SES from all over the world, all participating in lively interactive multistream sessions and workshops. Now in its seventh year, SES Industry Days has become an eagerly anticipated event for manufacturers and industry partners as they collaborate to progress the development of leading edge consumer electronic products in the industry, and ultimately enhance the entertainment, information and communications experience for consumers worldwide.

A citizen of the world – Welcome to SES neighbourhoods

The concept of the programming 'neighbourhood' has always been central to the satellite broadcasting industry, – where TV services are grouped on satellite locations so as to create a hub of interest to millions of people located within the satellite(s) footprint. SES has been at the forefront of creating attractive satellite TV neighbourhoods, and many leading broadcasters credit SES' innovations in this area with their long term business growth. The engaging satellite neighbourhood remains as important a business benefit to broadcasters as it ever was. And SES has global coverage that no other satellite provider can match.

Integration capabilities

With a robust fleet of 50 satellites, and state-of-the-art ground facilities worldwide, SES stands in a class of its own. Its network of engineering and business professionals spans the globe, helping broadcasters meet their goals with market-leading expertise that only comes from real-world experience and demonstrable success devising and deploying state-of-the-art multiplatform, multinational, multi-language, and now multiscreen distribution strategies. SES can integrate all the elements of the multiscreen satellite ecosystem, and can advise on technology and connect broadcasters with the world's most respected hardware and software innovators. This relieves much of the technological headache for broadcasters. It saves them from having to make unnecessary hefty in-house investments in expertise and infrastructure. Moreover, it lets them get on with the important job of developing compelling service offerings for consumers.



Sharing the roadmap is at the heart of supporting customers

Core to SES business and philosophy is the constant commitment to innovation, being forward looking, and developing a roadmap in collaboration with broadcasters. SES eagerly grasps the opportunity, and responsibility, of planning for the future, watching the global market trends carefully, and anticipating the opportunities and challenges its customers will face.

SES thinks ahead and does all it can to help customers extract maximum value from the services they procure from the company. Broadcasters are encouraged to build SES' roadmap into their own.

Part of SES' roadmap is future investment in bigger, more powerful satellites, and its abiding commitment to supporting innovation in satellite broadcasting and reception technology.

Conclusion

Satellite will remain the central nerve system of in-home entertainment and connectivity. More and more bandwidth for ever-more expectant consumers will be needed. Alternative distribution technologies simply can't match satellite's capacity and reach.

And each year, there will be functional and fun new devices available for enjoying content, intensifying competition for consumers' time, and their wallets.

Broadcasters will increasingly consider the need to capture and retain the attention of consumers wherever they are located to be a commercial imperative. In a highly fragmented media market, they will do whatever it takes to leverage their brand, create revenue opportunities, and forge stronger relationships with viewers by reaching beyond the living room, further into the household.

Thanks to the high - and increasing - capacity and capability of satellites, the 'bandwidth pipeline' into the home can keep growing as the hunger for bandwidth, and the need to deliver content to more and more screens and devices, inexorably grow. SES has a range of solutions that satisfy these needs today and tomorrow. Meanwhile, broadcasters can rest assured that delivering 24x7 world class support is business as usual at SES.

SES has vision for this future and is on hand to share it. At the same time, SES will continue to work collaboratively with broadcasters to unlock the potential of its worldwide infrastructure to ensure people get the entertainment, information and connectivity they need wherever they are in the home.





SES is close to you –
get in touch to explore
how SES can help you
successfully reach
multiple screens:

SES head office:

Château de Betzdorf
L-6815 Betzdorf
Luxembourg

Regional representation:

Accra | *Ghana*
Addis Abeba | *Ethiopia*
Bucharest | *Romania*
Dubai | *UAE*
The Hague | *The Netherlands*
Istanbul | *Turkey*
Johannesburg | *South Africa*
Kiev | *Ukraine*
London | *UK*
Madrid | *Spain*
Mexico City | *Mexico*
Moscow | *Russia*
Munich | *Germany*
Paris | *France*
Princeton | *USA*
Riga | *Latvia*
Rome | *Italy*
São Paulo | *Brazil*
Singapore | *Singapore*
Stockholm | *Sweden*
Warsaw | *Poland*
Washington DC | *USA*

Published in April 2014.

This white paper is for informational purposes only and it does not constitute an offer by SES. SES reserves the right to change the information at any time, and assumes no responsibility for any errors, omissions or changes.

For further information about SES, and to learn more about how to develop multiscreen, visit **www.ses.com** or email **info@ses.com**