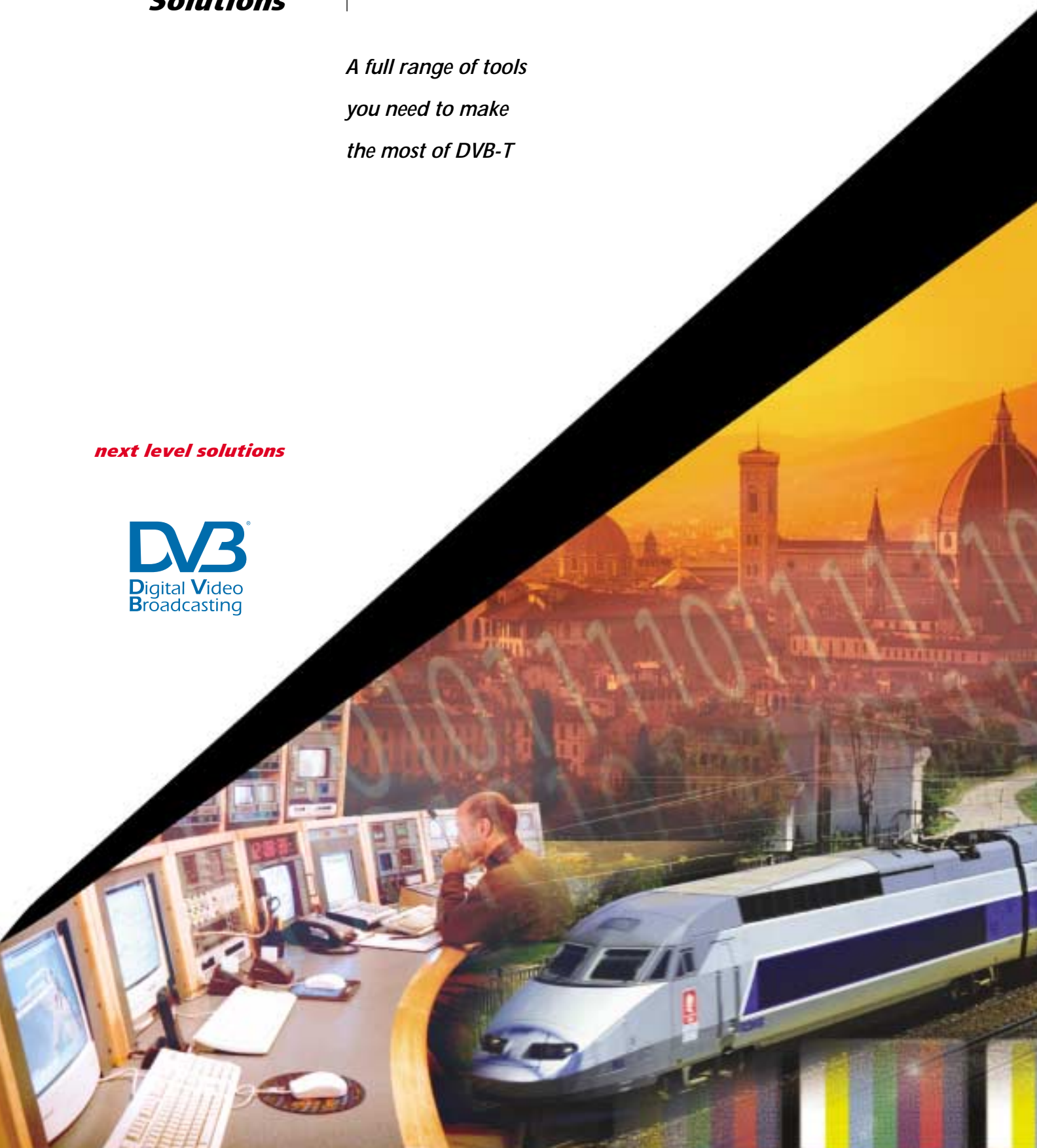


***DVB-T  
Solutions***

*A full range of tools  
you need to make  
the most of DVB-T*

*next level solutions*



## **DVB-T Solutions**

### **Make these Harris Broadcast Europe DVB-T benefits yours:**

- **A single source for a full range of DVB-T products**—Harris Broadcast Europe brings together the full range of solutions from ITIS Products, Hirschmann Solutions and Harris. Our industry-leading DVB-T portfolio includes encoders and SFN adapters, transmission equipment for all requirements, and global network management. Whether you need a single component or a complete network, we can help.
- **Exceptional modularity to meet your needs—today and tomorrow**—Harris Broadcast Europe's DVB-T product line is based on an open, scaleable and extensible architecture. Our portfolio of hardware, software and options enables you to configure a system with the features and the redundancy you need today with add-on capabilities as your needs evolve for tomorrow.
- **Investment security with proven solutions**—Harris Broadcast Europe offers the peace of mind that comes with proven technology. In fact, more DVB-T broadcasters are using our equipment more than anyone else's and our encoding, SFN, modulation, and transmission solutions are industry standards.
- **Commitment to the future**—From the earliest days of DVB-T, Harris Broadcast Europe has invested heavily in the development of essential cornerstone technologies, introducing the first modulation and SFN equipment. Today we are engaged in ground-breaking work in mobile reception, terrestrial return channel and multimedia car platform (MCP) technologies. It's part of our ongoing commitment to the future—yours and ours.

### **Step into your DVB-T future with confidence**

There's no question that DVB-T will give you capabilities that were undreamed of in an analogue world, enabling you to deliver a virtually perfect signal to fixed or mobile receivers as well as dynamic new data, multimedia and interactive services with their revenue potential.

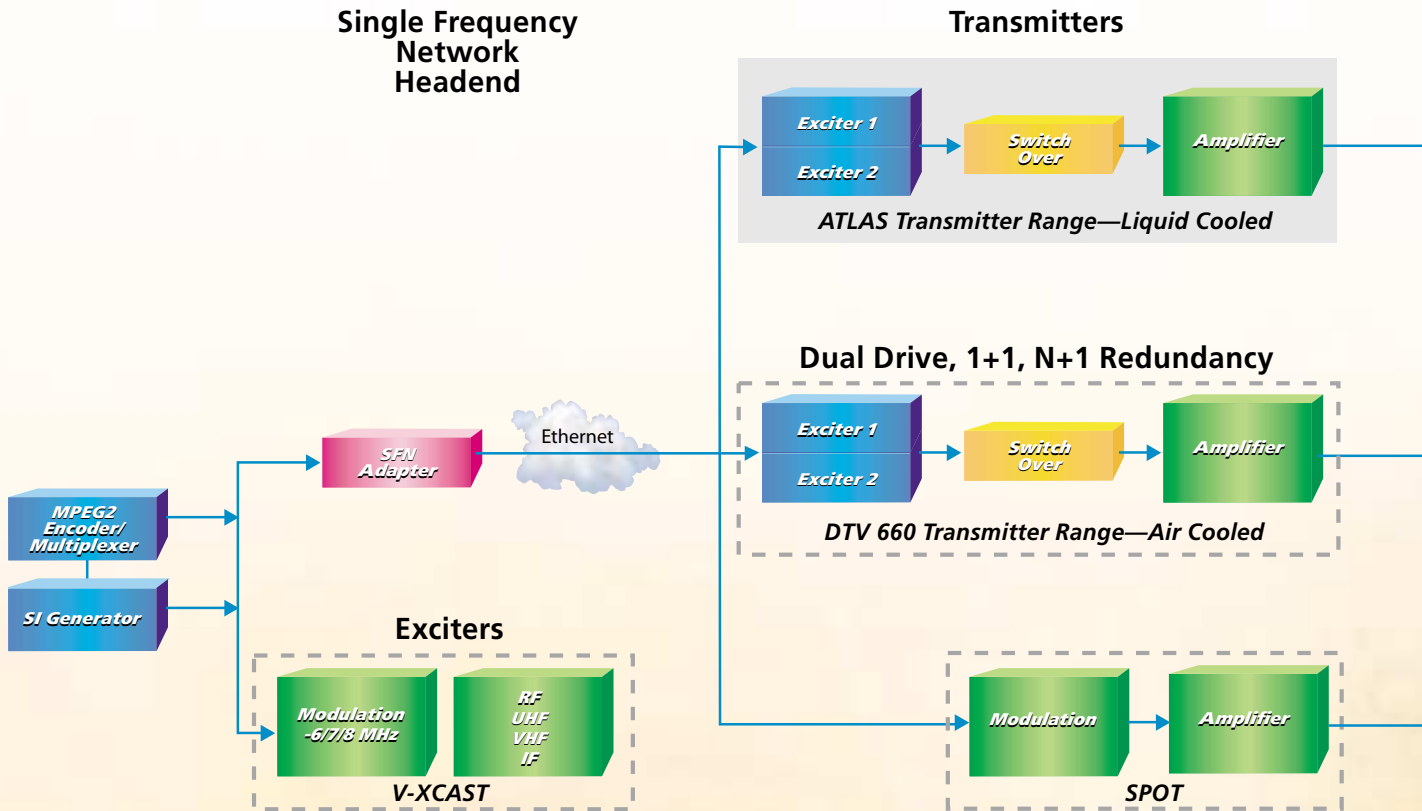
But the key to realizing the full potential of DVB-T is choosing the right supplier, and Harris Broadcast Europe would like to be that supplier.

You will find that we offer far more than a comprehensive range of solutions—including industry-leading products and technologies from Harris, ITIS Products and Hirschmann Solutions. We also have been the first to bring many cornerstone technologies to market. In fact, we commercialised essential modulation and Single Frequency Network products in 1997 and are continuing to lead the industry in advanced development.

Although DVB-T is new, it is not new to Harris. In fact, we have more systems operating worldwide than any other supplier. And because our systems are based on a modular and scalable architecture, they can be configured to meet your precise requirements today—and easily upgraded in the future.

We invite you to explore your possibilities with us.





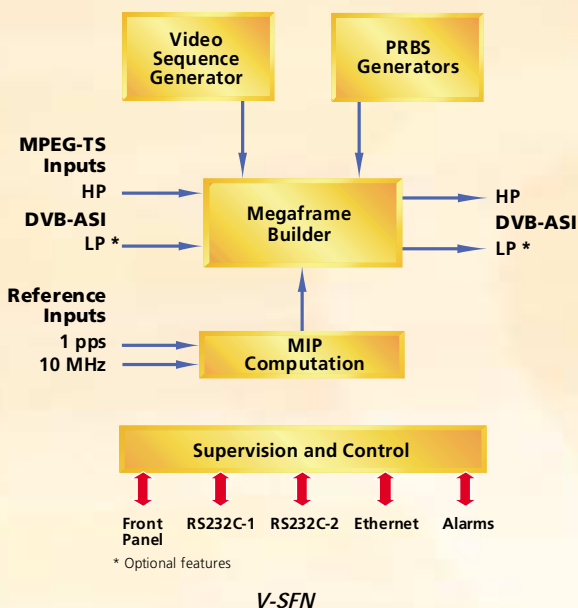
### DVB-T Headend Solutions

#### FlexiCoder™ MPEG-2 Encoding/Multiplexing System

- ⦿ The world's most popular MPEG-2 DTV encoder
- ⦿ Unique scalability and modularity to meet your precise requirements
- ⦿ Enormous range of video combinations
- ⦿ Future-proof design with "plug in" capability modules
- ⦿ Three frame sizes: expandable 5 or 21RU systems and nonexpandable 2RU system for single-channel SD or HD applications
- ⦿ Redundant power supplies and cooling fans with each frame
- ⦿ Top performance with proprietary standard definition statistical multiplexing/high-definition compression management

#### V-SFN SFN Adapter

- ⦿ Industry-leading transmitter and repeater synchronisation for Single Frequency broadcasting
- ⦿ Supports all 2K and 8K nonhierarchical and 68 hierarchical modes (depending on models or options selected)
- ⦿ 8 MHz bandwidth standard; 6 or 7 MHz available on request
- ⦿ Two ASI inputs for redundancy or hierarchical modulation (based on options or model selected)
- ⦿ Remote control of DVB-T transmitters
- ⦿ Bit rate adaptation and PCR restamping
- ⦿ Internal PRBS generators or video pattern
- ⦿ TCP/IP/SNMP interface for use in global network management systems



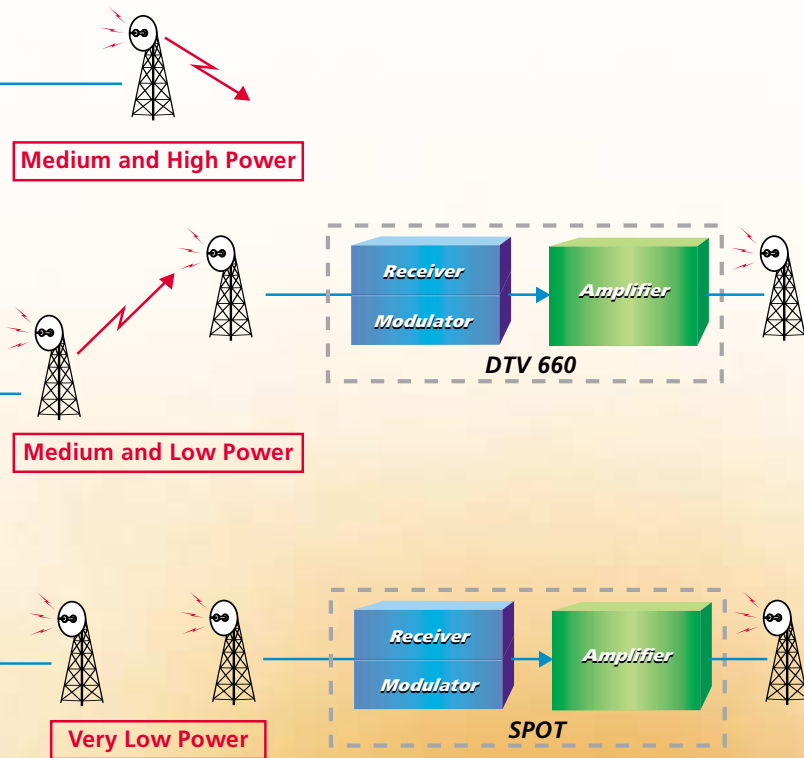
\* Optional features

V-SFN



# nto your DVB-T future with conf

## Digital Repeaters



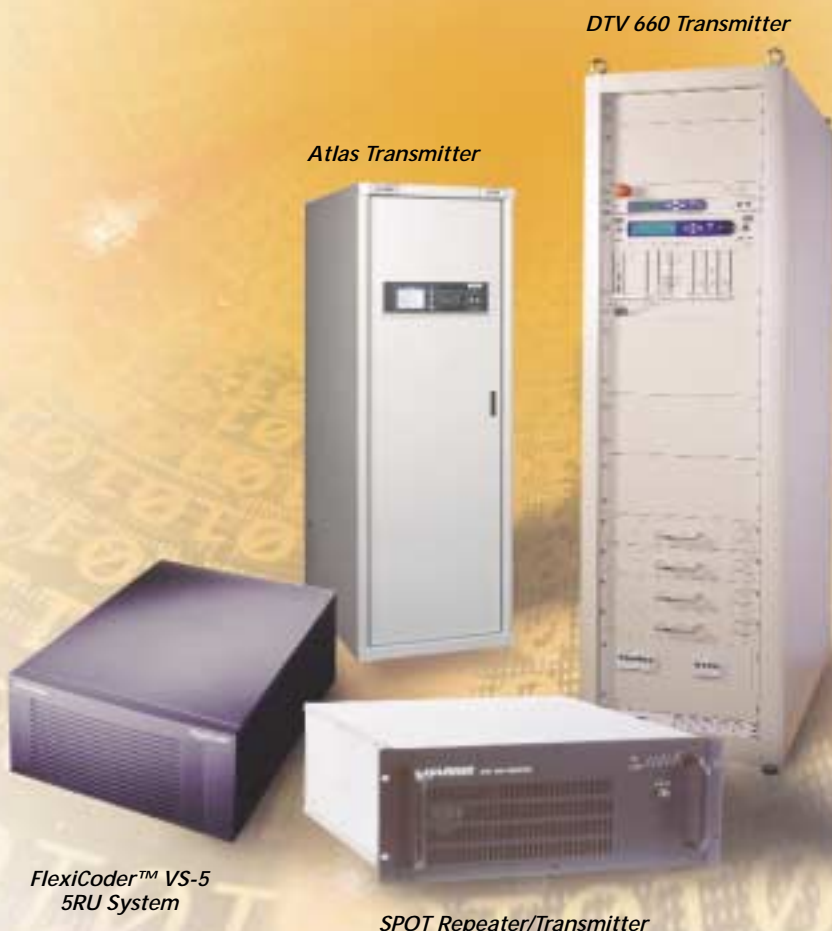
## DVB-T Transmission/Retransmission

### DTV 660 and Atlas Transmitters

- Models for all power requirements:
  - Low- to medium-power air-cooled Hirschmann DTV 660 Transmitters:
    - Band III: 100 mW–250 W
    - Band IV/V: 200 mW–2.5 kW
  - Medium- to high-power liquid-cooled Harris Atlas Transmitters:
    - Band IV/V: 450 W–6.2 kW
- Broadband design supports N+1 operation
- Redundant solid-state architecture keeps transmitters on the air
- Hot-swappable power amplifier modules and power supplies permit on-air maintenance
- Compact size ideal for space-constrained facilities
- Virtually intuitive control and monitoring locally and remotely with ergonomic Graphical User Interface (GUI)
- Wide range of control interfaces for integration into central network management system or web browser operation

### SPOT Low-Power Transmitter/Repeater

- 3 W, 12.5 W or 50 W digital UHF low-power DVB-T intelligent repeater/transmitter
- Ideal for SFN operation and gap-fill applications
- Digital demodulation/remodulation ensures pristine data stream, eliminates signal degradation
- Can insert local programmes into multiplex
- Channel transposition with full-error recovery allows repeaters to be cascaded at significantly lower cost
- TCP/IP and SNMP interfaces for use in global management system



FlexiCoder™ VS-5  
5RU System

SPOT Repeater/Transmitter

## **Global Network Management**

### **Harris Broadcast Manager**

- Facility or network monitoring, control and management
- Reduces costs, increases reliability and enables "management by exception" efficiencies
- Secure multiuser, multitasking system based on client-server architecture
- Integrated system of hardware and software
- Based on proven Harris NetBoss™ Manage.IT network management technology
- Modular and extensible from single-site system to complex distributed networks with multiple Harris Broadcast Managers reporting to supervisory system
- Supports SNMP-compliant *and* legacy equipment
- Centralised system and equipment status display via customisable graphical screens
- Status overview screens for major equipment and subassemblies; drill-down for detailed information on specific items or access to configuration and control functions
- Comprehensive alarm monitoring and logging
- Optional intelligent alert responses, database analysis and reporting
- Can work with existing element managers



### *Harris Broadcast Europe: Leading the world in end-to-end systems for digital broadcasting*

Since its foundation in 1922, Harris Corporation's Broadcast Communications Division has set the pace in the development of world-standard products and in enabling technologies for broadcasting. Over the years, Harris has introduced more than 70 major innovations—including many world standards that have literally changed the way in which our world sees and hears itself.

Today, Harris is at the forefront of broadcasting's transition from analogue to digital technology. Through its ITIS operation in Rennes, France, Harris is leading the industry in the development of advanced modulation, encoding products and technologies for DAB digital radio and DVB digital television.

In addition, the acquisition of the Hirschmann broadcast business in 2001 significantly expanded the Harris transmitter line with DAB, DVB-T and analogue TV transmitter systems as well as cable headend systems. These leadership products enjoy strong market positions—for instance, Hirschmann DAB transmitters are used by well over 60 percent of all DAB broadcasters.

Now, with the technology foundation and products from ITIS, Hirschmann, and its own product development, Harris offers a complete range of transmission systems for DAB and DVB-T, as well as AM, FM and analogue TV. Already established as the leader in analogue and U.S.-standard digital transmitters, Harris also offers cable headend systems, automation control and management systems, studio products, integrated systems and network-level broadcast management systems. Harris serves broadcasters in more than 125 countries.

