

# Nationwide Video Network Operations Centers ARRIS Global Services Case Study

## KEY HIGHLIGHTS:

- Challenge: Develop, build, and support network monitoring centers for a new video network
- Business Value
  - Time to market
  - Totally redundant system
  - Video monitoring expertise
- ARRIS Solution
  - Program/Project Management
  - Video Architecture & Headend Engineering
  - Detailed Design & CAD
  - Systems Integration & Performance Optimization
  - Operations and Monitoring Staffing & Training



## SERVICE OVERVIEW:

### The Business Challenge

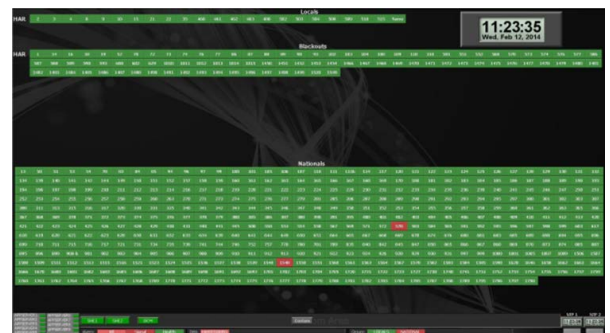
This major, nationwide US telephone company made the strategic decision to enter the video delivery business. Since this was a greenfield business for them, they sought a partner with deep, relevant expertise to help them get up to speed and into service quickly. ARRIS was chosen as the turnkey integrator for architecture and design, integration, program management, installation, commissioning, testing and operating the video network – including regional and national Network Operating Center (NOC) facilities.

## The Services Solution

The video network, designed by ARRIS, consisted of ten video hubs and two super headends serving nine states. With a telco mindset requiring “five nines” reliability, monitoring was of critical importance to this operator - and more stringent than other video operators. Redundant signal paths were provided – with each signal path actively monitored. Each hub and headend built by ARRIS included a “bullpen” NOC with a video and monitor wall. Grass Valley probes were used to monitor the signal path and Grass Valley software managed the signal reporting and rendered the results for monitoring and alarming. Similarly, Solarwinds systems were used to monitor headend operational data. A “Network NOC” was configured and staffed by ARRIS to monitor all of the hubs and headends at the national level. For the first two years of operation ARRIS provide approximately 150 on site staff at the hub, headend and Network NOC sites to monitor video operations, raise and resolve alarms, add and place channels and manage bandwidth and flow set up.

### Benefits of ARRIS Designed NOC

- Leverages ARRIS Video knowledge and Program Management
- Single Integration point
- ARRIS built third party eco-system
- State of the art, IP based architecture
- Ease of issue identification using ITU-T X.733 alarming design
- Non-intrusive Video Stream probes
- VMWare based systems
- Script based to empower users to build alarm scenarios
- Automatic Fail over capabilities



Monitor Wall –“Chiclets” View

The team provided Program and Project Management services for the entire project. The PMO was the single point of accountability for the total solution. Its role was to apply proven practices, knowledge, skills, tools and techniques in order to drive, monitor, coordinate and report project activities. ARRIS met all of the customer’s project milestones in a timely fashion.

## ARRIS Global Services Values

### Accelerate time to market:

Stay competitive with rapid deployment of new services

### Reduce costs:

Contain costs on deployment, integration, and support

### Maximize revenue and profits:

Optimize operations, ensure service quality, increase customer loyalty, grow revenue and profit margins

## Why ARRIS ?

### Multi-technology experience that is unique in the industry:

ARRIS has designed, delivered, and optimized end-to-end network solutions for service providers.

### Flexible business model and approach:

ARRIS can build a customized operations solution for virtually any network operations requirement.

### World-class support:

ARRIS provides support from committed and highly trained, experienced professionals, complete with state-of-the-art local support centers, test labs, and repair depots.

### Voice, Data, and Video Technology leadership:

ARRIS has a wealth of experience and expertise in introducing and operating new technology network systems.