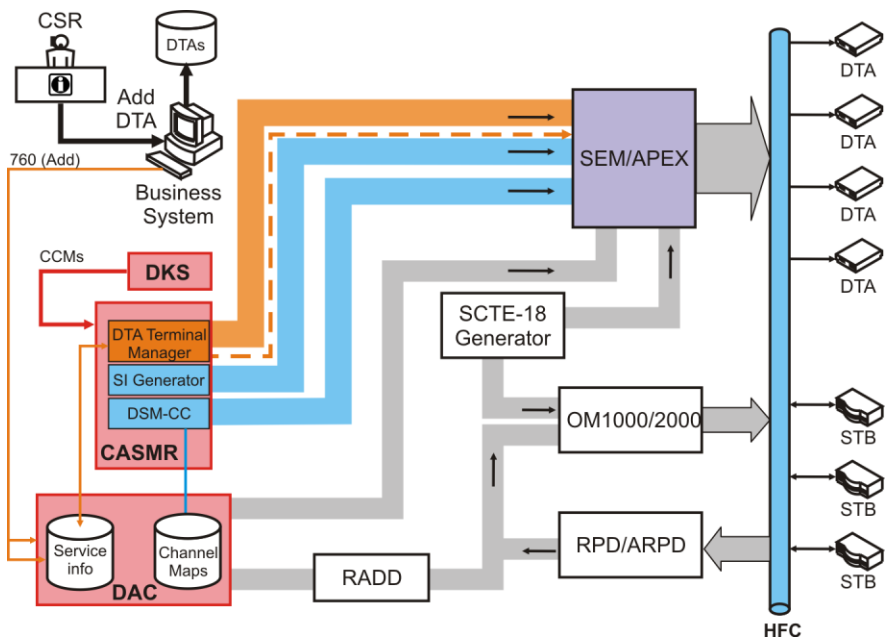


DTA Headend Configuration Service

ARRIS Global Services

SERVICE BENEFITS:

- Enable the headend for deployment of Digital Transport Adapters (DTAs) with full encryption
- Configuration of Digital Transport Adapters (DTAs)
- Reduce deployment risk
- Contain costs of integration
- Reclaim analog bandwidth to deploy new revenue-generating services
- Minimize interruption of service
- Reduce time to market
- Ensure interoperability of headend systems
- Provide 75 years of video experience
- Offer proven methodology and track record of deployment



SERVICE OVERVIEW:

Digital Transport Adapter (DTA) technology gives you a cost-effective means of realizing the benefits of an all-digital network. It makes it possible for your subscribers to continue watching their analog TV(s) when connected to an all-digital cable network, allowing you to recover analog bandwidth in order to launch additional, enhanced digital services. Enabling and controlling DTAs impacts the cable network beyond the adapter itself. DTAs rely on in-band, unidirectional communication which differs from the out-of-band command and control systems used for typical set-top box communication. Deploying DTAs requires the examination and possible modification of numerous digital video subsystems, including conditional access, code download, edge QAM modulation, emergency alert, and the billing/business system. There are also operational decisions to consider, including channel map configurations and encryption configuration.

The ARRIS DTA Headend Configuration Service provides professional planning and configuration of your digital headend for deploying DTA technology with full encryption. ARRIS has the expertise in system integration, field engineering, project management, and technical support required to successfully deploy DTA solutions. With the help of ARRIS, you are assured of expert installation and configuration with minimal downtime and risk.

Assumptions and Prerequisites

This list of assumptions and prerequisites is not intended to be exhaustive. Prior to the commencement of services, ARRIS will inform the customer of any additional responsibilities necessary for the performance of the services.

Assumptions

- ARRIS and the customer will each provide a single point of contact for the project
- ARRIS will provide services only for the work described in the Statement of Work.

Prerequisites

The Customer will:

- Work with ARRIS Account Manager to complete preliminary questionnaire and determine the integration work that ARRIS will be contracted to perform.
- Perform system integration of required changes that ARRIS will not be contracted to perform. The system must be set to SCTE52/DVS042 mode on the DAC and all edge devices.
- Ensure that an SCTE-18 EAS Server is configured.
- Ensure the Billing System supports DTA deployment and modification.
- Make sure that all 3rd -party DTA's support Full Encryption Modified Privacy Mode.
- Provide space, power, and cooling for new equipment.
- Ensure readiness, provide access, and provide support for all DAC, billing, and headend networks.
- Provide all necessary documentation, including but not limited to IP addresses, channel maps, network diagrams, headend design with RF return combining, and network diagrams (including interconnects to various hubs), Electronics Industry Association (EIA) channel configurations, and the final system design.
- Stage equipment at remote sites with site personnel who will assist with the physical setup.

Services Deliverables

DTA headend configuration with full encryption requires coordinated support of ARRIS personnel, customer site DAC personnel, and customer network personnel. Based upon an agreed Statement of Work, ARRIS will perform the following functions applicable to the given implementation:

- Work with customers to complete the site survey for the DTA Headend configuration to confirm that the customer's environment matches the information found on the preliminary questionnaire and identify potential issues.
- Provide project management leadership and coordinate project activities:
 - Create and maintain a project plan together with the customer's project management team
 - Track and report on status and action items
 - Create a detailed cutover procedure in cooperation with the customer

Services Deliverables (continued)

- Verify the readiness of the network for conversion:
 - Assess site configuration, software versions, encryption schema, and network topology
 - Review and approve the network's design
- Execute system integration:
 - Complete installation and configuration (if applicable) of CASMR and DTA Key Server (DKS), DTA Terminal Manager, and SI Generator
 - SEM/APEX configuration (in-band multicast, PID routing, EAS verification, etc.)
 - DAC configuration (DTA channel maps, code download, DSP parameters, etc.)
 - Conduct an acceptance test and review results upon completion
- Optionally, ARRIS can perform additional integration as requested:
 - Rack and stack new equipment
 - DAC/RADD upgrade(s) to the appropriate prerequisites (hardware and software)
 - SEM/APEX software upgrades to the appropriate prerequisites
 - Configuration of multiple DACs
 - Complex/numerous channel map configurations
 - DTA channel map overrides
 - System encryption type conversion (if applicable): DAC, VOD edge QAMs, central encryption devices, replacement of IRT/MPS, etc.
 - DTA Key Server installation
 - Configuration of new equipment to add digital services in reclaimed analog bandwidth
- Provide the customer with information required to make future modifications:
 - Customer will have access to a detailed process document for configuring additional SEM/APEX for DTA support

DTA Headend Configuration Service

To order these services, contact your sales representative.

ORDERING INFORMATION

Part Number	Description
476666-099-00	DTA Headend Configuration Service. SOW needed, Contact Services B&Q for pricing

IMPORTANT NOTICE: THIS DATA SHEET IS FOR INFORMATION PURPOSES ONLY AND REMAINS SUBJECT TO CHANGE BY ARRIS UNLESS AND UNTIL A FIRM ORDER FOR SERVICES IS ACKNOWLEDGED AND ACCEPTED BY ARRIS SUBJECT TO ARRIS STANDARD TERMS AND CONDITIONS WHICH WOULD FORM THE BASIS OF AGREEMENT BETWEEN THE PARTIES.

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