ARRIS DSG Implementation Services help broadband services operators adapt their network infrastructure to merge cable modem and STB traffic over a single, vendor-independent DOCSIS® network. DSG enables the provisioning of high-bandwidth interactive services with a faster return on your investment and lower operating costs.

Several trends and influences are impacting the broadband services industry today.

1. While the broadband services industry strives to provide more value-add services for its subscribers, the legacy systems upon which their networks are built face serious challenges.
2. Bandwidth, scalability, reliability, availability, and utilization must be maintained and increased.
3. The Telecommunications Act requires that all new Set-top boxes (STB) support separable security.
4. Concurrently, the broadband services industry is migrating traditional proprietary headend and STB technology to all-digital converged networks based on OpenCable Applications Platform (OCAP) and DOCSIS®.
These factors present many challenges for the broadband services industry, but ones that can be overcome with expert DOCSIS® Signaling Gateway (DSG) knowledge and services from ARRIS. ARRIS offers DSG services that migrate broadband services operators from a traditional, proprietary network to a single open, standards-based IP network.

Additionally, provisioning DSG with ARRIS enables the network to be ready for future OCAP products, services, and software. ARRIS DSG Services provide complete deployment and system integration services needed to deploy the open, standards-based network infrastructure.

**Services Deliverables**

DSG Implementation Services require the coordinated support of ARRIS personnel, Customer site DAC personnel, and Customer IP personnel. Based on the assumptions and pre-requisites noted below, ARRIS will:

- Complete a site survey for the DSG Integration to confirm that the environment matches any preliminary questionnaire and identify potential issues.
- Update Remote Addressable DANIS/DLS (RADD) hardware and application software, and then set up RADD network connectivity.
- Verify Digital Addressable Controllers (DAC) software is configured to enable DSG.
- Configure RADD onto DAC Application for DSG including the ARRIS Broadband Services Router (BSR), and offer consulting for configuring other vendor Cable Modem Termination Systems (CMTS) equipment.
- Configure digital STBs for DSG via latest code download.
- Confirm end-to-end digital STB connectivity to ensure the DSG integration is complete and ready to be turned over to the Customer.
- Conduct acceptance test and review results upon completion.
- Configure up to 10 DSPs over one DAC/RADD/CMTS system.
- Test up to 5 DSPs over one DAC/RADD/CMTS system.

**Assumptions and Prerequisites**

This list of assumptions and pre-requisites is not intended to be exhaustive. Prior to the commencement of Services and thereafter, ARRIS will inform the Customer of any additional Customer responsibilities necessary for the performance of the Services.

**Assumptions**

- ARRIS and the Customer will provide a single point of contact for the project.
- ARRIS will provide services only for the work described above. Other issues should be handled through normal escalation methods.
- The proximity of DSPs are limited to two physical locations within 200 miles of each other unless all plants can be tested and have their test ASTBs remotely monitored from a single location.
Prerequisites

The Customer will:

- Provide support for all network (physical and logical) components located between and including any devices such as Ethernet fiber transmitters, routers, and switches.
- Define IP addresses between the DAC and the DSG RADD.
- Set up and define the network for Protocol Independent Multicast (PIM).
- Provide multicast addresses.
- Configure DHCP server.
- Configure and verify firewall between DAC and RADD.
- Rack and cable DSG RADD on the network.
- Configure CMTS to support its DSG features.
- Configure and verify passage of all required DSG Traffic, including User Datagram Protocol (UDP), Internet Protocol (IP) Multicast, and Application Tunnels.
- ARRIS STBs must be available for testing prior to verifying functionality of non-ARRIS STBs.
- Customer will provide ARRIS with CMTS config file, or sections of the file pertaining to DSG, 10 days prior to the FE on-site work start date.

DOCSIS® Set-top Gateway DSG Implementation Services

To order these services, contact your sales representative.

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<thead>
<tr>
<th>ORDERING INFORMATION</th>
<th>Description</th>
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<tr>
<td>476666-046-00</td>
<td>DOCSIS® Set-top Gateway (DSG) Implementation Services</td>
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