



Florida PALM Project  
**IV&V Assessment Report - August 2019**  
Deliverable IVV2.2

Presented by:

Information Services Group Public Sector

September 12, 2019

imagine your future®



---

Copyright © 2019, Information Services Group, Inc. All Rights Reserved.

No part of this document may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval devices or systems, without prior written permission from Information Services Group, Inc.

---



## TABLE OF CONTENTS

<b>1</b>	<b>IV&amp;V MONTHLY ASSESSMENT .....</b>	<b>1</b>
1.1	Executive Summary .....	1
1.2	IV&V Overall Risk Summary.....	7
1.3	IV&V Monthly Assessment Dashboard.....	8
<b>2</b>	<b>IV&amp;V DETAIL REPORTING .....</b>	<b>9</b>
2.1	Project Risks.....	9
2.2	Project Issues.....	11
2.3	Other IV&V Activities.....	12
<b>3</b>	<b>IV&amp;V CONTACT INFORMATION.....</b>	<b>13</b>

# 1 IV&V Monthly Assessment

## 1.1 Executive Summary

ISG began independent verification and validation (IV&V) services for the Design, Development and Implementation phase (DDI) of the Florida PALM Project (Project) with the July 2018 reporting period. IV&V observations are made by participating in project meetings and deliverable review processes, examining project work products, and conducting IV&V specific interviews with the Project Team and stakeholders.

### August 2019 IV&V Summary

*Overall, with few exceptions, IV&V continues to observe the Project producing work products and deliverables according to plan with results reflecting the collaborative efforts of State and Accenture resources.*

*The Project devotes appropriate attention on emerging risks related to key dependencies on integration with FFMS systems on the present schedule, and on the completion of interim solution analysis to confirm and provide essential information to FFMS partners and all state organizations. The importance of this cannot be overstated as sponsors of the Project and within agencies along with partners at FFMS and elsewhere need to understand and plan for significant changes that will affect all organizations upon the implementation of Pilot in 2021. At that time, Florida PALM will universally present fundamental changes to the structure of the State's general ledger chart-of-accounts, replace the Cash Management System (CMS), replace select critical interfaces used by agencies, and introduce new reporting methods. The Project has made and continues to make considerable effort to convey this message via multiple channels and at almost every engagement with stakeholders.*

*Due to prolonged delays incurred by two deliverables, one of the ratings for the fifteen standard project areas reported in the IV&V Monthly Assessment Dashboard (Section 1.3 of this report) has been adversely affected. Otherwise, the fourteen other standard assessments remain positive. The deliverables causing the negative assessment are described in more detail below and in Section 2 of this report.*

*During August, The Project Deputy Director submitted notice of resignation effective September 13. A transition plan was quickly developed. The responsibilities will be shared by the PMO and BPS Track Managers. This will assure continuity and help to mitigate the loss of extensive institutional knowledge and expertise on the Project's SSI contract, project management protocols, and insights embodied in the incumbent. Project leadership will assess Track management needs as the transition progresses.*

### Schedule Variances and Fiscal Risk

During August, four of six deliverables previously reported to have incurred prolonged delays were completed and accepted by the State. The four include: Security and Technical Compliance Strategy

(D36), Information Technology Controls Strategy (D37), Reporting Strategy (D38) and System Infrastructure Strategy (D43).

At the end of August, two deliverables remained late and required escalated attention to address conditions preventing acceptance. These were the Technical Architecture Strategy (D41) and Data Architecture Strategy (D42).

*The delays present a fiscal risk as described in Section 2 of this report.*

### **Organization of Cross-Track Squads**

The project has formed a set of cross-track squads to focus on finalizing the designs and then the development of reports, interfaces, data conversions, PeopleSoft program extensions, system-based forms, and workflows (collectively referred to as the RICEFW inventory) and user access/security. Each squad comprises resources from the BPS, SDS, and OCM teams and is designed to be self-sufficient to organize engagement activities with DFS Divisions, agencies, and other stakeholders to identify and confirm design specifications, and then proceed with the development and test preparation activities needed to produce and validate the solution elements represented by the RICEFW Inventory deliverable (D64). This approach may also identify and gather additional information that affects the interim solution design.

*IV&V has observed a well-organized introduction of squads by State and Accenture management. Generally, the introduction of squads to the project has been received with interest and enthusiasm by the Track teams. Individual squad team meetings to identify, plan, and assign tasks were initiated during August. The Project staff are balancing squad responsibilities with other commitments and track-specific activities. Some Accenture resources are assigned to more than one squad which may result in capacity overload. Track Managers and Project leadership are working closely to coordinate demands and avoid conflicts.*

### **Interim Solution Complexities**

As reported previously, the Project continues to assess potential risks associated with the design of the interim solution to be implemented statewide upon Pilot implementation, July 2021. The Project's phased approach presently depends on a hybrid solution of PeopleSoft combined with the continued reliance on Departmental FLAIR for the interim period between Pilot implementation and the completion of Wave 2, when all State organizations will be fully implemented on Florida PALM financial functions.

*IV&V observes the definition of interim processes will identify some but not all potential modifications to FLAIR. The complexity of this undertaking is mutually understood to be very high. The scope is wide, and the base functionality of FLAIR, and custom-built system, has evolved over decades to encompass numerous additional software customizations within FLAIR developed to support specialized functions. While the Project works to define what's needed from FLAIR and other FFMS systems to operate Florida PALM and what data from Florida PALM will be provided to those systems, DFS-OIT is working to identify modifications needed to FLAIR functionality to assure operability.*

*Feasibility of the interim solution within the present project schedule is fundamentally dependent on the State's completion of interim process analyses and designs to identify and specify the changes needed in systems such as FLAIR, MFMP, and STMS. That information combined with*

*interface dependencies and proposed usage with FFMIS and agency business systems are projected to be completed by the end of November 2019.*

*Consideration of all viable interim technical options needs to be balanced with what can be achieved within the timeframe and, just as importantly, what makes best operational sense for both Pilot and Wave organizations. The present design would be more operationally complicated for Pilot and/or Wave organizations if FFMIS partner systems cannot be modified in time to process recognizing the new Florida PALM state chart of accounts while maintaining the current FLAIR chart of accounts structures.*

### **Other Engagement Activities**

The OCM team conducted the first Readiness Survey of FLAIR/CMS users and Change Champion Network designates in Pilot, FFMIS and Wave organizations. The responses to this survey are under review. The Readiness Team continued working with Pilot Agency Liaisons and has engaged nearly all Wave Organization Liaisons. This process is planned to continue until all organizations are actively engaged.

The OCM Workforce Transition Plan deliverable (D62) was submitted in August and remains under review. D62 is designed to guide the State on how best to prepare employees and operations for changes in how processes will be executed using the new system.

The Master Readiness Workplan (MRW) has been published and is accessible to all organizations via the Project website. The MRW provides each organization with a practical implementation plan that can be expanded and adjusted to suit internal needs. The OCM team facilitated a survey to agencies and other stakeholders to gather input and feedback on the new chart-of-accounts design. As of the end of August, nearly 100% of organizations had responded.

*IV&V observed the Project was able to incorporate detailed schedule revisions into the overall project schedule and communicate plans to stakeholders beginning in August. This enables the project to manage near term efforts more precisely and share information needed by DFS Divisions, FFMIS partners, and inform the Master Readiness Workplans to be used by Pilot and Wave organizations to begin implementation activities.*

### **Technical Activities**

During August, the SDS teams worked closely with the BPS team and DFS OIT team to continue analysis of interface dependencies within the Florida PALM solution. Collaborative meetings focused determining technical process flow and confirming the sources of data origination to refine the interim business process models.

*IV&V observed the SDS and BPS teams use a thorough, detailed list of business process model questions to engage in productive discussions to obtain written responses by the DFS OIT team. This work is expected to continue through the end of calendar year 2019.*

The SDS and OIT Teams continue to collaborate on project task scheduling and to clarify assumptions and requirements for the modifications to FLAIR and the development of interfaces between FLAIR, Information Warehouse, FFMIS systems, and Florida PALM. This work is essential to designing how the combined systems will support interim operations following the implementation of Pilot.

*IV&V observed the teams demonstrate a shared a sense of urgency and commitment to work together to understand the questions and pursue answers. As of the end of August, the teams are working to confirm assumptions pertaining to the Information Warehouse approach, FY20/21 Year-end Processing, Managed File Transfer (MFT) server use for agency file transfer, and review of Payroll's need for a direct data read in Florida PALM.*

The SDS and DFS OIT Teams continued working meetings focused on identifying, scheduling and executing joint technical infrastructure tasks. During August the teams considered two Load Balancer/Application Delivery Controller (ADC) software options to satisfy the project's need to meet security and logging requirements that are not met with Oracle's OCI Load Balancer as a Service (LBaaS) alone. RAIDL Decision 129 was created to track this need. After analysis and discussion both Project SDS and DFS OIT teams agreed that F5 offered the better solution to meet Florida PALM and State DFS OIT requirements.

During August the Project SDS and DFS OIT teams also discussed whether the Florida PALM solution's SMTP email traffic is best hosted with the existing State infrastructure or within the Florida PALM's Oracle Cloud Infrastructure. Both teams engaged in collaborative analysis and discussions to elaborate on agreements contained in the contractual Statement of Work concluded that the SMTP server is best hosted within the State's existing SMTP server.

*IV&V observed productive discussions and cooperation between the Project and OIT teams during joint team meetings. During SMTP discussion meetings, the SDS and DFS OIT teams reviewed OCI's email rating rate limiting parameters, logging readiness, and capabilities of each option and the State's desire to implement Data Loss Prevention (DLP) email scanning in the future. After thorough consideration of options, the teams reached a reasonable and justifiable conclusion that the existing, State-hosted SMTP server will best meet these key factors vs. an OCI-hosted solution.*

The non-production build of Oracle Cloud Infrastructure (OCI) continued in August. Non-production build results are documented within the Florida PALM Non-Production Infrastructure Build (D71) deliverable with an expected completion date of October 31, 2019.

*IV&V has observed detailed planning, daily SDS lead and team meetings, and Accenture, PALM SDS, and OIT knowledge sharing sessions focused on the OCI build. While the OCI Build SDS team has encountered challenges, the team pulls together as needed to resolve identified issues along the way while keeping this effort on track to complete on schedule.*

### **Other Late Deliverables**

At the end of August, the acceptance of two other deliverables was delayed. The Requirements Traceability Matrix (D49) and the Gap Inventory (D50) were both delayed pending the completion of finalize the interim solution as described above.

D49 is to contain the complete and final set of functional and technical requirements within a matrix that will be used to assure the deliverables can be traced in designs, test cases, and subsequently through test results to prove each requirement is accounted for upon implementation.

D50 is to contain the complete set of Peoplesoft extensions. Extensions are modifications to be developed in the software to facilitate Florida PALM requirements that cannot be best met by the delivered software product. The ongoing analysis and design work for the interim solution may identify



the need for additional extensions. Therefore, D50 cannot be considered complete until that work is finished. D49 is dependent on the completion of D50 to meet state acceptance criteria.

*IV&V has and will continue to review the information contained in both D49 and D50. Notwithstanding the risks associated with the interim solution design dependencies and project schedule described earlier in this report, the delay incurred by D49/D50 do not present immediate risks to the overall project.*





*Continued on next page.*



The following pages contain the IV&V monthly assessment in which ISG provides independent observations using an evidence-based rating method applied to fifteen standard project areas listed in the following table. Further information regarding ISG’s IV&V methodology can be found in deliverable IVV2.1, the Florida PALM IV&V Management Plan.




Project Areas		
General Project Management	Project Scope Management	Project Time Management
Project Cost Management	Project Quality Management	Project Human Resources
Project Communications	Project Change Control	System Capability
Project Stakeholder Management	Project Risk & Issue Management	Project Procurement
System and Acceptance Testing	Project Vendor Management	Project Training

The ratings are calculated using a five-point scoring range designed to objectively assess conditions in each project area based on evidence observed and examined. Each assessment is given a score between 1 and 5 with 1 being the highest severity and 5 to indicate no notable findings. Ratings are applied to multiple tasks or deliverables in each project area to calculate an average score for the area. The resulting score for each area is used to determine a status based on the commonly used scale of green, yellow, or red, as defined in the table below and indicated by an icon for each project area in the IV&V Dashboard.

Color	Icon	Description
Green		The assessment category or area is on track without material issues. The Project Team should consider any recommendation offered by the IV&V Team as process improvement opportunities only.
Yellow		The assessment category or area faces a challenge or set of challenges that could, if left unmanaged, negatively impact the Project’s outcome in terms of schedule, cost, or quality in the future. The Project Team should prioritize corrective action.
Red		The assessment category or area faces a challenge or set of challenges that threatens the Project’s outcome in terms of schedule, cost, or quality. The Project Team should take corrective action immediately.
White		During the project life cycle some project areas may not have activities underway. Project areas not assessed will be reported using a white icon.

When a project area is assessed and rated as red or yellow, ISG will provide a detailed description including status and actions taken, recommendations on potential solutions and contingency plans to resolve issues and reduce risk.

## 1.2 IV&V Overall Risk Summary

Overall Status			
Current Period	Prior Period	Overall Trend	Observations <i>Based on standardized IV&amp;V scoring</i>
			<ul style="list-style-type: none"> <li>• The DDI Phase continues to progress according to plan.</li> <li>• Resource allocation is monitored closely by Track Managers and PMO. Accenture has increased resources in key areas based on recent rescheduling of activities.</li> <li>• Activities are allotted reasonable time to complete provided Project secures commitment from FFMS partners to fulfill critical dependencies.</li> <li>• The project’s managerial and reporting structure supports staff development, process definition, quality assurance, and other functions necessary for project success.</li> <li>• Risks and Issues are being managed proactively and with an appropriate sense of urgency.</li> <li>• PMO demonstrates consistent and strong cost management practices.</li> <li>• Quality control, financial control, and vendor processes are established and consistently executed.</li> <li>• The Project regularly conducts proactive communications to stakeholders.</li> <li>• An effective organizational structure combined with positive morale among staff continues to foster a collaborative environment.</li> <li>• Collaboration between the State Project Team and Accenture Team continues to produce acceptable results.</li> <li>• The IV&amp;V Team has identified no significant risks to DDI Phase activities. New risks under development are being assessed by IV&amp;V.</li> <li>• The Project trend is stable as work toward executing the statement of work and producing deliverables is proceeding according to plan with some schedule variation that presently does not affect milestones.</li> </ul>

### 1.3 IV&V Monthly Assessment Dashboard

IV&V Dashboard			C U R R E N T	P R I O R
	PROJECT AREA	PROJECT AREA DESCRIPTION	Rating	
1	<b>General Project Management</b>	Consistent and effective project management processes are being used and coordinated within the Project and with Project participants to achieve desired results	■	■
2	<b>Project Scope Management</b>	Effective scope management practices are evident	■	■
3	<b>Project Time Management</b>	The Project is effectively managing the timely completion of the activities	■	■
4	<b>Project Cost Management</b>	The Project is routinely estimating, budgeting, managing, and controlling costs so that the project can be successfully completed. However, the prolonged delay of two deliverables originally planned to be accepted and paid for in FY 18-19 presents a risk because Carry Forward appropriation is set to revert at the end of September. The Project has escalated the situation at Accenture and an action plan is underway.	◆	■
5	<b>Project Quality Management</b>	The Project is defining quality measures and using continuously improving processes to achieve intended results	■	■
6	<b>Project Stakeholder Management</b>	The Project has identified key individuals, groups or organizations that could impact/be impacted by the Project and is using the appropriate strategies to ensure stakeholder engagement on Project decisions, effective governance, and productive sponsorship participation	■	■
7	<b>Project Communications Management</b>	The Project team is identifying stakeholders and supporting timely, appropriate and accessible communications	■	■
8	<b>Project Risk &amp; Issue Management</b>	The Project is effectively identifying, analyzing, and controlling project risks and issues	■	■
9	<b>Project Procurement Management</b>	The Project is appropriately managing the acquisition of products and services needed from outside the project team and is effectively managing the resulting contracts over the life of the contract	■	■
10	<b>Project Vendor Management</b>	The Project is monitoring vendors and subcontractors to confirm they meet all requirements and managing performance where needed	■	■
11	<b>Project Human Resource Management</b>	The Project is acquiring, developing and managing appropriately skilled and adequately staffed project teams	■	■
12	<b>Project Change Control</b>	The Project is appropriately managing the change request process and potential impacts on project scope, project objectives and goals, and implications to the overall project plan	■	■
13	<b>System Capability Management</b>	The Project is effectively communicating technical process and security requirements (and changes to requirements), managing configuration/development activities, controlling software and environments to support project life cycle	■	■
14	<b>Project System and Acceptance Testing</b>	The Project has identified and developed the appropriate test scripts to evaluate and accept the system and supporting deliverables	○	○
15	<b>Project Training Management</b>	The Project is developing and delivering training to successfully prepare users for use of the new system	○	○

## 2 IV&V Detail Reporting

### 2.1 Project Risks

The fiscal risk presented by the prolonged delay of deliverables D41 and D42 have resulted in the first yellow assessment of the IV&V monitoring criteria. A rating of yellow indicates a challenge that could, if left unmanaged, negatively impact the Project’s outcome in terms of schedule, cost, or quality in the future. The Project Team has prioritized corrective action, as described below.

IV&V Dashboard			C U R R E N T	P R I O R
	PROJECT AREA	PROJECT AREA DESCRIPTION	Rating	
4	<b>Project Cost Management</b>	The Project is routinely estimating, budgeting, managing, and controlling costs so that the project can be successfully completed. However, the prolonged delay of two deliverables originally planned to be accepted and paid for in FY 18-19 presents a risk because Carry Forward appropriation is set to revert at the end of September. The Project has escalated the situation at Accenture and an action plan is underway.		

D41 and D42 identify the interrelated, overarching strategy to define the Solution’s enterprise architecture framework. Both deliverables remained in revision with Accenture at the close of this reporting period.

*IV&V observed Accenture and State management indicate that downstream work is not adversely impacted by these delays. However, because the costs of D41 and D42 were planned to be paid for with Fiscal Year 2018-2019 appropriations, the continued delays present a fiscal risk because the Carry Forward appropriation for these items is set to expire at the end of September. This situation has resulted in a negative assessment reflected in the standardized assessment criteria described in this report.*

As reported earlier, these deliverables are managed and created by technical experts within the Accenture SDS Team because they contain details on the technical composition of the Florida PALM solution and the strategic approaches to the implementation of the new system in its entirety. As such, the deliverables draw heavily on the information contained in the contractual statement of work and further details from Accenture and Oracle on how the managed and hosted system is built, configured, and is to be managed in operations. Much of this information is prescribed by the fact that the State has contracted for a commercial off-the-shelf solution that is managed and hosted by Accenture/Oracle for the duration of the current contract.

*IV&V observes that the collective nature of these strategy deliverables has been a contributing factor to the elongated creation, review, and revision cycles. This is because Accenture’s initial reliance on technical subject matter experts resulted in documents full of technical information that were not as helpful as the strategic communication devices the State expected. Expectations have been clarified to expand and refine the documents to increase their value to the State.*

*The State Project Director escalated the situation with Accenture and an action plan was created. Accenture senior management has directed remediation activities.*

*Additionally, the Project has adopted steps to explain concepts, develop content outlines, and confirm expectations at the outset of work on written deliverables.*

*IV&V recommendations:*

*The State should review DEDs for similar deliverables planned and adjust content to ensure expectations and acceptance criteria reflect fully the primary objectives of the deliverable and any ancillary purposes that the deliverable may be intended to serve.*

*Accenture should enlist the services of professional writers to ensure that content is intact, complete and comprehensible to readers after experts compile the relevant raw subject matter.*

*Require that Strategy DEDs include the following criteria to ensure the documents describe more than just the approach to executing the contractual statement of work:*

- Define the strategic goals pertaining to the deliverable in terms of value to the Project and the State;*
- Describe approaches that will be employed to achieve the strategic goals; and*
- Define measurable outcomes that indicate goals have been achieved.*

As of the end of August, the Project logged one new risk and maintained seven open risks logged in the SharePoint application used to record and administer risk identification, mitigation and resolution.

Risk 178 was logged to acknowledge the critical interdependency for alignment of the Florida PALM project schedule and DFS OIT's schedule to develop FLAIR modifications for the interim solution. If the timing of development, testing, and delivery of the two systems are not in sync, the Project's planned implementation date for Pilot and beyond will be at risk of delays.

Risk 177 recognizes that State organizations with technical dependencies on Florida PALM, including agencies and FFMS partners, may not have enough time to ensure full preparedness for testing of data interfaces and any other potential integrations by the Project's scheduled start date for testing in August 2020.

*IV&V has observed the Project continue to develop the information needed to identify technical dependencies, explain designs, and establish and share schedules for organizations to use to plan and prepare for implementation. While this risk focuses primarily on the need to exchange data with agency business systems, in July the Project began to draft more specific risks associated with FFMS partners systems, which are dependent on Florida PALM. Likewise, Florida PALM is dependent on those partner systems as fundamental components of the overall solution for the State.*

Risk 172 was logged in April to acknowledge the risk to project execution that arises when any key position goes unfilled. Project leadership plans to mitigate this risk by assigning interim resources to act in the unfilled role.

*As described in Section 1 of this report, the State Deputy Project Director's resignation in August is being addressed by a transition plan designed to mitigate the loss, preserve continuity and fulfill responsibilities. In August, Accenture filled the SDS Manager position with a full-time resource.*

Risk 174 was logged in May to acknowledge the potential inability of DFS staff to participate in all expected project activities occurring through the summer of 2019 due to operational priorities relating to fiscal year end activities.

*IV&V has observed that DFS participation has remained steady and reflective of a commitment to balancing priorities and helping the Project stay on schedule. The Project continues to work with DFS to mitigate this risk by planning and communicating regularly. Organizing points of contact, availability, and participation levels is complicated in some cases because some key individuals fulfill multiple project roles serving as subject matter experts, operational decision makers, and Executive Steering Committee members.*

The remaining four risks have been logged since 2018. Two of these risks are being actively mitigated by the successful execution of planned project activities. Two risks are being regularly monitored to determine if mitigating action is needed.

- Two risks focus on the potential consequences of insufficient awareness, participation, and cooperation of stakeholders and major decisions on whether to proceed with the project at defined milestones. Each of these have active plans for mitigation underway as part of the Project's Risk Management Process and in the way the Project has integrated organizational change management in pursuit of its goals.
- Two risks recognize potential delays in key decisions if decision-making positions are vacated due to attrition and/or transition, and the potential emergence of new requirement mandates and their effect on the project plan. Each of these are being actively monitored to determine if the Project will need to implement a mitigation plan.

## 2.2 Project Issues

The Project had no open issues logged during this reporting period.

*IV&V did not observe any other issues requiring action.*

## 2.3 Other IV&V Activities

During this period, the following deliverable reviews were undertaken by the IV&V Team as part of our ongoing role in the quality assurance process.

Subject	Activities	Description
D007	Review and periodic quality control analysis	Project Schedule
D040	Review and recommendations on deliverable	Organizational Readiness Assessment
D041	Review and recommendations on deliverable	Technical Architecture Strategy
D042	Review and recommendations on deliverable	Data Architecture Strategy
D047	Review and recommendations on deliverable	Conversion Strategy
D049	Review and recommendations on deliverable	Requirements Traceability Matrix
D050	Review and recommendations on deliverable	Gap Inventory
D055	Review and recommendations on deliverable expectations document	Application Configuration and Development Strategy
D057	Review and recommendations on deliverable	Process and Transaction Mapping Analysis
D059	Review and recommendations on deliverable	Interface and Integration Strategy
D062	Review and recommendations on deliverable	Workforce Transition Plan
D064	Review of deliverable	RICEFW Inventory
D071	Review and monitor build schedule. Attend status and working build sessions.	Non-production Infrastructure Build
D073	Review and recommendations on deliverable expectations document	Knowledge Transfer Scorecard
D076	Review and recommendations on deliverable expectations document	Published Interface Layouts
D127	Review and recommendations on deliverable expectations document	Production Support Strategy
I-WP05	Review and recommendations on internal work product	Current State Data Analysis
I-WP06	Review and recommendations on internal work product	Current State Interface Research & Analysis
I-WP010	Review and recommendations on internal work product	Interfaces and Connections Inventory
I-WP296	Review and recommendations on internal work product	Interim Business Process Models



### 3 IV&V Contact Information

ISG (Information Services Group) (NASDAQ: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including 75 of the top 100 enterprises in the world, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; technology strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry’s most comprehensive marketplace data.

For questions regarding this report, please contact:

Mark Fairbank, ISG Director  
IV&V Project Manager  
[Mark.Fairbank@isg-one.com](mailto:Mark.Fairbank@isg-one.com)

or

Nathan Frey, ISG Partner  
IV&V Principal  
[Nathan.Frey@isg-one.com](mailto:Nathan.Frey@isg-one.com)