CCMS Benefits:

1. Workload Tracking – Receiving Procurement Packages

Pre-CCMS: Previously, CGM tracked pending workload through a variety of tools. These included PPLC (and its predecessors PAL and the Active Contracts List) and the Contracts Package Inbox. Given that the Contracts Package Inbox was solely an email repository, however, and relied on a direct translation and data entry of the items received in the inbox into the workload tracker, some items were lost, entered incorrectly, or incomplete. In addition, there was little technical capability to create multiple instances of the same action and link them to one another. If a request was for a mod or a new contract, these items were simply created in the system with a status of "PENDING." This was especially poor in that locating Oracle requisitions was difficult as they did not exist in the system as independent records. Primary disadvantages included:

- 1. Probability of actions not entered properly or missing when manually translated from Contracts Package Inbox to Workload Tracking System (PAL or PPLC)
- Simplified tracking prevented multiple different records existing independently though also linked together, so contract action, action memorandum, and requisition were not separate records as capability to link them together if entered.
- 3. No confirmation method existed for ensuring that actions were "Received" by CGM when sent to Contracts Package Inbox.

Results of these disadvantages:

- 1. Poor ability to match up system pending records with Oracle Requisitions, as they did not exist as their own records and had to be "found" in the system through other reports or matching lists to determine which requirements belonged to which requisitions.
- 2. Occassional instances of actions "falling through the cracks" as they were not manually entered from Contracts Package Inbox.
- 3. Program Offices were always unsure as to whether CGM had actually received their contract action and had to wait to be contacted by a Contract Specialist, or had to call Procurement Assistants or Team Leads to verify the action was received.

Post-CCMS: CCMS has allowed for a much more sophisticated workload tracking ability. Actions sent from the program office include multiple records, including the action memorandum and its supporting documents, and the requisition as directly imported from Oracle iProcurement. These are forwarded to the CGM inbox, where they can then be assigned directly without the need for additional manual data entry into a separate tracking system. In addition, reporting capabilities and indicators in the system notify customers that the action has been received. Primary advantages include:

1. Components of the action (Action memorandum, Requisition, and final contract action) both exist and can be tracked independently but are also linked together explicitly in the system,

- making for more ease in locating which requisition and action memorandum belongs to which contract action.
- 2. All actions received in the CGM Inbox are automatically received by CGM
- 3. Indicator of "conjoined action" lets program office officials and customers know with 100% accuracy that the action has been properly received by CGM (available to all POMS users). Additional reporting tools allow the program office to see, without having to pick up the phone or send emails, what contract specialist is working the action and what priority it has been assigned (See "CGM Pending Actions and Folder Locations" available to all POMS users)

Benefits of These Advantages:

- Substantial ease in verifying whether oracle requisitions have been awarded and what contract action they were obligated against as they can be tracked independently and also can be traced to their connected actions. This is already making EOY activities much easier as reporting can focus on the funded actions and requisitions, and follow their progress as well as readily know which requisitions have been awarded and have obligations recorded against them and which have not.
- 2. Much less need for customers to contact CGM simply to verify their package has been received and who is working on it. Can focus more on contacting CGM to get specific information and can more readily contact the exact Contract Specialist working on the action.

Other Steps:

First bi-weekly, then monthly POMS User Group sessions held by CGM Procurement Analyst for POMS users, to clarify and help them identify how to take advantage of the system's workload tracking transparency and to identify and satisfy reporting needs, leading to creation of "CGM Pending Actions and Folder Locations" Report to directly benefit DCO POMS Users and A&F OCIO POMS Users.

2. Data Integrity – Document Electronic Repository

Pre-CCMS: In conducting CGM's Quality Review Board activities for FY 2011, the QRB noted many errors in entries to FPDS where data entered into FPDS (as required by FAR 4.6) did not match data in the hard copy contract file and, in some cases, did not match data entered into PPLC/PAL. As was discovered by the QRB, this was almost entirely due to simple user error in selecting the right type of record in FPDS when entering the initial contract award. These early mistakes often caused all subsequent records to be incorrect and could not be corrected without deleting all existing records. This is due, primarily, to FPDS' own data integrity safeguards. In addition, the recent IG audit into MCC's Contract Management Process also found that CGM's electronic contract document repository was not properly organized and that certain documents could not be readily located. This is largely because a secondary data entry task was required of all Contracting Officers and Specialists were entering data into FPDS. In addition, the electronic documents were also included in network share drives. This lead to a variety of disadvantages:

- 1. Redundant data entry by contract specialists from data already entered into the workload tracking system (PAL/PPLC and ACL) into FPDS. This redundant data entry was highly inefficient and often inaccurate as Contract Specialists had high workloads and these additional data entry steps were often given a lower priority than the most pressing matter: actually awarding contracts to fulfill customer requirements.
- Difficulty in maintaining a paper file and an electronic share drive, as well as policing both, constituted a burden and inefficiency for the contract specialist. Often, the contract specialist had to ensure that the proper files were placed in the share drive in the proper location. This would involve complex systems of folders, with folders for each base contract, separate folders for its modifications, further separate folders for its task orders, and even further separate folders for modifications to those task orders. Maintaining this level of organization was difficult and highly manual in requiring the individuals to build all the required folders.
- 3. Burden on Contracting Officers/Team Leaders, as they had the near-impossible task of:
 - a. Reviewing the paper contract file to make sure it was accurate (highest priority)
 - b. Reviewing the data entered into the workload tracking system (PAL/PPLC) to make sure it is accurate
 - c. Reviewing the electronic contract file on the share drive to make sure it is complete
 - d. Reviewing the data entered into FPDS to make sure it is complete

Results of these Disadvantages:

- Redundant data entry increased chances for error and made consistency highly difficult,
 resulting in data having to be entered in three places (in paper contract document, in workload
 tracker, and in FPDS) resulting in errors in any one of the three different data repositories as
 data in FPDS and the workload tracker would suffer at the expense of making sure the paper file
 was as accurate as possible.
- **2.** High level of difficulty in properly organizing share drive folders and a high level of complexity in share drive folders, making documents difficult to file and then difficult to find.
- **3.** Much higher workload required of Team Leaders/Contracting Officers and a very high review burden in assuring all these multiple data sources matched, were accurate and complete, resulting in too much time spent on managing the information and the data and not enough time spent on managing workload and quality of documents.

Post-CCMS: CCMS takes data entered into the system and uses it to build the baseline contract documentation as well as pushes and retrieves data entered into FPDS. This has immediately cut the data entry required from three locations to one location. In addition, CCMS' "briefcase" function allows all related attachments and important documents to be uploaded and stored in the action they are linked to. Advantages include:

1. While the data entry into CCMS is more cumbersome, the data is then automatically replicated into both the contract document and into FPDS. This replicates the data throughout the contract lifecycle.

- 2. Modification documents, master contract documents, order documents, and others may be stored directly with the action they are linked to, which can be searched through the "Action Lookup" function in CCMS and do not require complex folder systems to be built and maintained. Instead, the "connected actions" function can be used to locate the different actions and the documents associated with them.
- 3. When reviewing the contract action for award, the team leader can verify the following IN ONE LOCATION:
 - a. Accuracy of FPDS data (which is populated by the workload system)
 - b. Completeness of electronic contract file in that all documents are included in the actions' "briefcase"
 - c. Accuracy of other MCC data previously entered into the workload tracker

Benefits of These Advantages:

- 1. The linkage between contract documents, FPDS, and the workload tracking data increases data integrity substantially and, in the end, reduces the redundant data entry burden. This in turn reduces errors and ensures that data is entered correctly the first time.
- 2. Contract documents can be located with ease once uploaded to the briefcase.
- 3. Reviewing the completeness and accuracy of the file and the data entry is much more streamlined than previously, where some reviews (Specifically FPDS and the completeness of the electronic contract file) may have received only cursory attention as it would require the reviewer to visit different websites and share drives. The unified presentation of CCMS places all elements of the review in a readily accessible location.

Other Steps:

Much remains to be documented and standardized in how Contract Specialists will store contract documents in CCMS as well as ensuring that data entry is accurate and well-understood by the specialists. While this is much easier in the CCMS environment than it was previously, it remains an important area in which existing SOPs are constantly in need of updating and new CGM staff need to receive CCMS training and guidance as quickly as possible. CGM's Procurement Analyst has already drafted an SOP addressing proper storage of contract documents and more SOPs, including guidance on Approvals and document generation are forthcoming.

3. Reporting

Pre-CCMS: Pre-CCMS, very limited reporting was available on actions both in the aggregate and individually. Actions were accorded one of two status: "Pending" or "Awarded." In addition, ad-hoc reporting was very difficult, as database developer resources from OCIO had to be involved and had to write custom reports when they themselves had limited knowledge of contracting. Also, due to those issues referenced in Section II., reporting data from FPDS (where ad hoc reporting is exceptionally difficult and only standard reporting can be done) and PAL/PPLC often did not match and data fields were kept simple and few in order to keep an already substantial amount of data entry required on the part of the Contract Specialist from growing even further. Disadvantages included:

- 1. Limited ad-hoc reporting capability. SSRS developers and other individuals needed to be involved in order to create ad-hoc reports. Multiplied by the simplistic and limited nature of data fields available.
- 2. While a much larger and richer data source, FPDS data reporting is inflexible and difficult and was often at odds with internal data sources due to issues referenced in Section II.

Disadvantages:

- 1. Adjusting standard reports or providing ad hoc reports could not be done timely when ad hoc reports can often assist with audit inquiries, track down anomalous actions for correction, and provide management data to respond to taskers.
- 2. Status reporting was heavily simplified, focusing only on "pending" and "awarded."
- **3.** Access to reports was not automated and had to be emailed and sent or, at the very least, provided via sharepoint to customers.

Post-CCMS: CCMS' Advanced Operational Reporting (AOR) is a vast improvement over CGM's Ad Hoc and standard reporting capabilities. Richer data sets can also be created. AOR also allows reports to be published to POMS users. Advantages include:

- 1. AOR allows for rapid adjustment of existing reports, which can then be manually adjusted to add or remove additional data depending on needs
- 2. AOR allows for measuring not just processing time and quantities of action awarded, but enabling more qualitative looks at a Contract Specialists' workload by noting the types of actions done and enabling ease of peer-to-peer and team-to-team comparisons. Previously the difficulty of ad-hoc reporting made this a challenging issue to explore.
- 3. POMS users can run the reports as needed without requesting them from CGM

Benefits:

- Truncated or more detailed reports can be given to auditors/senior leadership on a variety of different topics by making small adjustments to standard reports – all without requiring developers from OCIO to become involved as previously
- **2.** Workload assignments can be made based on overviews of Specialists' workloads as given by AOR, including consideration of richer data than was available previously
- 3. Leveraging of all potential FPDS values enables CGM to get better reports on when contract options are coming up for renewal, comprehensive information about new awards done after CCMS initiation, as well as more output focused looks at a Specialists' workload, including processing time of the action, peer-to-peer comparison of that processing time, peer-to-peer comparison of processing time by the type of action, etc.
- **4.** POMS Users are more informed about what is happening in CGM and what phase of the process their requirements are in

Other Steps: While AOR holds distinct advantages. Presentation of the reports is very tabular and the tool does not produce sophisticated graphical reports as often desired. These still have to be done

manually, although the data provided from AOR is more easily adjusted and fine-tuned than previously. The CGM Procurement Analyst continues to work with POMS users and CGM users to determine what reports may be helpful and creates and adjusts/creates reports as need be. Some more complicated reports often prove difficult to create, but CGM is constantly developing and refining these reports to include better information. Previously, CGM would need to involve OCIO to do so.

4. Other Considerations

CCMS has also created greater automation and linkages in several different processes, including:

- 1. Automation of the Action Memorandum Process The movement of MCC to using CCMS' Acq-Planning module for the Action Memorandum process has created the ability not just to automate the Procurement Package Process (as indicated above in Section I.) but also has enabled the routing, approval, and storage of the Action Memorandum process. While previously action memorandums were distributed via email, discussed, electronically signed, then put in various repositories, including share drives and sharepoint websites, now they are all stored in one location. In addition, routing and approval information is captured along with the stored document, and CCMS allows linkage of all procurement packages and documents directly to the final contract action.
- 2. Requisitioning Fidelity CCMS' developer provided a utility enabling MCC to upload Oracle requisition data directly into CCMS, translating that requisition data into system PRs. This has been an indispensable improvement as previously CGM Contract Specialists had to manually enter LOAs into the document. As LOAs are long and complex, this frequently was an error and required administrative modifications to correct after the face. Now, requisition data is accurate and it is no longer a burden on the Contract Specialist to re-create this complex data manually in the contractual document.
- 3. **Final Contract Review** Similarly to the Action Memorandum Process, CGM has also used the routing and approval capabilities of CCMS to automate the final contract file and document reviews, enabling electronic routing, approval, and documentation of that routing and approval to the necessary parties (MD of CGM, OGC, and VP of A&F where applicable) in one location. This reduces the need to move around paper contract files through all of MCC to the necessary approvers, allowing the approvers to focus on elements they deem most important and view them electronically in the system. This reduces paper required and provides a greater accounting and documentation of the review process.