Social Security Administration IT Transformation Industry Day Agenda

Welcome:

- Rajive Mathur Deputy Commissioner for Systems and Chief Information Officer (CIO)
- Sean Brune Chief Program Officer, IT Modernization

• Infrastructure and Platform Migration: John Foertschbeck

Senior Advisor, Office of Systems Operations and Hardware Engineering (OSOHE)

• State of Authentication: Robert Collins

Associate Commissioner and Chief Information Security Officer (CISO), Office of Information Security (OIS)

• Work Management: Wayne Lemon

Acting Associate Commissioner, Office of Software Engineering, Office of Benefit Information Systems (OBIS)

• Electronic Health Records: Jude Soundararajan

Executive Director, Heath IT, Office of Systems

Workflow Management and Business Process Management Technology: Jian Wang

Chief Engineer, IT Modernization

Closing: Seth Binstock

Associate Commissioner, Office of Budget, Finance, and Management, Office of Acquisition and Grants (OAG)

Infrastructure and Platform Migration

Presenter: John Foertschbeck–Senior Advisor, Office of Systems Operations and Hardware Engineering (OSOHE)

	Question	Response
1.	What does your data center modernization look like at SSA?	<u>Mr. Foertschbeck:</u> Currently, we are doing a number of things in our data center. We are building an on premise cloud. We are looking to consolidate as much as possible our different management infrastructures that we have in the data center. We still have a mainframe presence and that will continue. As we go forward, the mix of workload access across those three platforms may change as we determine the best platform for where applications need to run. Our goal is to provide an infrastructure that is as flexible as possible to support wherever the business needs to go in order to meet their needs.
2.	One centers on your ATO requirements and if you're going to be looking not just internally but externally with partners and having partners that may be linking to or leveraging SSA infrastructure also need to meet ATO requirements. Is it Fed RAMP? And if so, is there a specific Fed RAMP level of certification or accreditation that you're looking for partners to maintain as it relates to infrastructure?	<u>Mr. Collins</u> : We have to follow Federal and NIST requirements as it relates to the data rather than the systems that the data rides on. Wherever the data goes is where those ATO requirements essentially are going and need to be met. The type of data is what determines the level. The impact (low, medium and high) of the ATO is driven by what the data is that is being transferred or processed over that system. With Fed RAMP, it is the concept of doing it once and using it multiple times. Anything that is outside of our environment that we are going to send data to does require that ramp approval to go through the joint authorization or for an agency sponsored Fed Ramp package.
3.	What role is SSA going to play in sponsoring partners because I am familiar with the fed ramp accreditation process and know there's a fairly significant backlog. Is SSA sponsoring systems today with a look toward the future in those requirements?	<u>Mr. Collins</u> : It is very limited due to resource requirements. It would really depend on the solution and how important that solution to meeting our mission. It is independent.
4.	Could you provide a little more insight into the document management architecture innovation that you're contemplating?	SSA Response: In 2016, and as part of the modernization effort, the Deputy Commissioner of Systems, as Chief Information Officer (CIO), tasked the Office of Systems Architecture (OSA) with assessing and evaluating the migration of IBM Content Manager, and its DB2 z/OS Database from IBM System z running z/OS to a virtualized x86 environment running (RedHat) Linux. The overall strategy is to reduce operating costs while maintaining, at least to some extent, the same scalable, flexible and fault tolerant features provided on the IBM mainframe facilities.
5.	You mention that you're looking to pilot a document management architecture. And our question really was around whether any of the contemplated RFIs that were identified in the brief how that intersects with what the document	<u>Mr. Collins</u> : They are completely separate. The RFI that we were referring to was for a cloud management platform.

	architecture pilot is contemplating. If there is a link at all or if it's completely something separate.	
6.	Is a big data platform in any of the planning that you're doing now for this infrastructure migration upgrade?	<u>Mr. Brune</u> : Yes, big data is part of our overall strategy as we go forward and we are looking at that now.

State of Authentication

Presenter: Mr. John Collins– Associate Commissioner and Chief Information Security Officer (CISO), Office of Information Security (OIS)

	Question	Response
1.	Is SSA currently doing any type of behavioral adaptive type of authentication?	<u>Mr. Collins</u> : Yes, we do some type of authentication there. We collect data that is just device information, ID address. However, we only use this on the backend. We are not using it in real time, which is something that I would really like to start exploring. I think that is a lot more on the leading edge of these technologies and identity management.
2.	What has SSA done in the federation space?	<u>Mr. Collins:</u> We are developing a shared federated identity management platform. We have been collaborating already with multiple financial service providers (FSPs). We are working with login.gov. We are working with IV&V. We would be very interested in what other types of partnerships, public or private, we should be entertaining or bringing into this federated identity space.
3.	What keeps you up at night?	<u>Mr. Collins</u> : We store and process some of the most vital bits of information on the population as a whole. How do we ensure that we increase usability to enable our mission but really protect that data in a way that is meaningful? Not just checking the boxes, but how we are actually employing solutions that make our security posture more secure.

Work Management

Presenter: Mr. Wayne Lemon– Acting Associate Commissioner, Office of Software Engineering, Office of Benefit Information Systems (OBIS)

Question	Response
1. What is the proposed process for stakeholder engagement to facilitate the transformation?	• <u>Mr. Lemon</u> : I am the IT Lead for the work management benefits domain. I have partners on the business side that I work with and communicate with regularly. We communicate regularly, as part of the business and IT partnership. We talk about the vision. We talk about the plan. We talk about product discovery outcomes, as well as, the need to work together to move forward in our modernization. We were all involved consistently and regularly in the customer discovery. The process is similar to a conveyor belt. As you go through product discovery and you get enough information in terms of capabilities and features, then you start to move forward in identifying a first set of deliverables, with particular capabilities and features. We communicate regularly with our business partners not only through product discovery but also through regular discussions and meetings to maintain lockstep for the vision and moving forward.
	 <u>Mr. Brune</u>: As part of our development effort, particularly development efforts that relate to public-facing software, generally our Internet capabilities, we do have a user experience group within the agency that guides product teams through the discovery process particularly for stakeholder engagement. That can include focus group activity. It can include and often does include user tests of prototypes or preliminary versions of software, and usability testing both on campus and remotely. We have conducted this type of activity for several years both internal to the agency. We do that with our technicians as we deploy software. External to the agency, we can involve members of the public on a voluntary basis in both the focus group activity as well as the usability test. <u>Mr. Lemon</u>: Usability testing and the user experience work that we do
	actually helps to ensure the end user can maximize the use of any software we develop that they use on the job on a day-to-day basis. User experience and usability activities are critical role in acquiring user feedback and making sure, we are on target.
2. I have a question about your goals in regards to interacting with your consumers and beneficiaries with the field office and the 800 numbers. We know that those numbers and the needs from those folks are increasing. Is your goal to increase or decrease those customer interactions or what are your metrics and what are you targeting?	• <u>Mr. Lemon</u> : In terms of the 800 number and any other channels that we have, our end user is ultimately the SSA Knowledge Worker. We understand the need to deliver the tools, technology and modern approaches to help them serve the public. It is not just the field office technician. Individuals also work the 800 number as well. Part of modernization is going to be informed by some of the additional aspects and information we acquire as part of product discovery. We are looking at the claims intake process but we have to get to some of the other areas in terms of channels that we have to provide service to the public. In terms of the actual metrics in and around that, that will come about I think as we go through the process should look like in terms of various metrics, in terms of efficiencies and how well they serve the public.
	• <u>Mr. Brune</u> : The agency has an omni-channel approach that is all of the above in office, by phone, online and new, emerging support technologies like synchronous health for online users. We envision for the near-term that

		we will have a business requirement to support all channels. The public is increasingly opting for self-service and we want to meet their need for service but as Mr. Collins mentioned earlier, we serve all members of the public. It is a very diverse population and as such, we continue to have an omni-channel approach to public service.
3.	An earlier IT mod business case that I came across indicated that there would be upcoming, agile development projects associated with Title II, Title XVI disability earning numeration. Perhaps others. Are those enhancements still planned and how might we learn more about those plans?	 <u>Mr. Lemon</u>: In work management for Title II and XVI, we are actually in the process of completing what we call product discovery; identifying more specifically the technical user stories and tasks that will lead us up to beginning actual development using Agile teams. <u>Mr. Brune</u>: I would add that we do have Agile software development underway across all six business domains and that is going to continue for the duration of our five-year plan. It is to target development for our future state and supported by ongoing business process re-engineering across those core business processes. Those domains that are mentioned in the IT Mod Plan are really the core business functions that the Social Security Administration must perform to administer the nation's social insurance programs. We are in the process of Agile development. Agile development is product oriented for multi-year delivery of products over the next four years related to our modernization effort. Established teams will continue and new teams will start. New products will begin in the coming years but it is underway at present.
4.	I wanted to know if you could expand on your volume numbers as it relates to your omni channel support as it relates to supporting incoming claims, inquiries, maybe volumes around calls versus volumes around email inquiries and such?	 <u>Mr. Lemon</u>: In terms of volume of customer base, approximately 61 million beneficiaries Title II Retirement Survivors Disability Insurance and about 8.1 million receive Supplemental Security Income. <u>Mr. Brune</u>: I would reference the statistics that Mr. Mathur mentioned in his opening remarks today. Those beneficiaries and recipients are a portion of our customer base. We also serve non-beneficiaries who inquire about their earnings record and social security number. We also serve business partners, wage reporters and federal, state and local entities with which we exchange data. In a given year, we handle about 36 million calls on our national, toll-free phone number. We have approximately 42 million visits to our field offices and we mail outbound 278 million paper notices, letters. We on an average year have over 400 million visits to our website. We do not disclose information on unencrypted emails outbound. On occasion, we do receive inbound inquiries. If they are general in nature, they could be handled with a general response referring them to a pamphlet or a publication that is available. If they are specific in nature, they generally are not handled in email communications. They are referred to another channel (in person Field Office visit or telephone). The My Social Security Portal, which is the online storefront for our business, is striving to have an authenticated use case for all of our customers. Within that portal, we do have a secure messaging capability that is growing and used.
5.	We have some questions around the Agile development process resources within SSA, sort of the magnitude, sort of development of Agile teams.	• <u>Mr. Lemon</u> : IT modernization is an agency priority. In terms of the individuals, we target seven to ten individuals per team and multiple teams. The agency obviously has a lot of work on its plate in other areas as well; however, IT modernization is a top priority. Therefore, we are using IT Mod's priority to help provide the resources required for the work effort required.

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6.	What's the decision process that SSA goes through in evaluating stakeholder requirements relative to a buy versus build solution, looking out into the industry for COT solutions or GOTS opportunities versus driving the internal Agile development process?	•	 Mr. Lemon: With regarding to upholding stakeholder requirements, buy versus build analysis is one-step we consider as an important aspect of modernization. One aspect we need to be careful of is the fact that our systems are heavily based on legislative, policy and regulation. Our automation is a reflection of the agency's mission. Opportunities around products or services have to align accordingly in supporting the agency's mission the legislative mandates, policies and regulations. We have conversations with the customer around their needs. Their needs often drive whether or not we pursue a buy versus build approach in IT modernization. Mr. Mathur: When we are looking at any investment of IT dollars and looking to do any sort of work, we have a bias, a policy that is cloud first and COTS first. Whenever we are looking at what the solution might be for needing something either for the public or something for an employee, whatever software is being considered, and whatever capabilities is being considered, we have to look externally and that is the policy that we have in the initial scoping out of the process and the product. We have substantially increased our Agile work over the last two years. We were just in the beginning stages in 2016 where we had probably less than ten teams that were working on Agile and now we have well over 50 across 11 different products. We have come a long way and we continue to look at everything we are doing in a new light as we embark on modernization and even non-modernization work. Mr. Brune: To operationalize and effectuate that cloud first, COTS first approach, our capital planning and investment control process as required by federal guidance does include a product evaluation of all alternatives: build in house, hybrid build-buy, buy from the commercial sector. That analysis is documented and reviewed by our agency investment review board at the approval stage. Any investment can be requested to be updated either by the CIO, the sponsoring organiz
7.	Could you speak to the processes that you have in place today to support the evaluation of alternatives, the evaluation of alternatives as new requirements come to light and your industry engagement? Could you speak to kind of the forward looking level of engagement that SSA will maintain with industry in support of the evaluation of alternatives around requirements as a mature soliciting input from industry given the cloud first, COTS first orientation that you have?	•	<u>Mr. Brune</u> : First, we follow federal acquisition rules and second, all teams, all products are encouraged to do vigorous market research. That research includes publically available information. That research can include a request for information. That research can include industry days' product or topic specific as well as a program created like today's Industry Day. We have done Industry Days in the past that have been physical meetings here on our campus in Woodlawn. This is the first time we have done one virtually by teleconference with the slide deck distributed in advance. It is part of our effort to explore all opportunities to engage the stakeholder community. In addition, as I mentioned on a prior response, our product planning beyond the procurement angle does include stakeholder engagement, which can be through structured interaction with members of the public, through focus group meetings, and through discussion with specific constituencies that follow the Federal Advisory Act for guidance. All of those public, external-facing activities inform our planning for executing a business requirement. <u>Mr. Mathur</u> : We are reorienting our approach to use product and product management in everything we do, our investments, how we do our work, and how we are organized to do our work. It goes hand in glove with Agile. These are tried and tested practices in industry. It is something new for government. Not project but product. When we look at any opportunity for

		capability, it has to fit into some sort of a product. Within the product, the
		teams look at engaging externally and Seth [Binstock] will certainly talk about we engage in the early stages of the investment process. We have a policy that the team has to look at, alternatives outside, and consider how they meet the product requirements that we are looking for. I mentioned in my opening remarks that we think about modernization in many different ways and one of them is people. This is part of that in helping them to operate differently and looking at their work differently and then delivering on a product in a product view, not in a project view or a technology or systems view. There are things that we are doing to put this in place, working with business partners to make sure that we get the requirements right and of course on the acquisition side, making sure that we are engaging industry correctly.
		• <u>Mr. Binstock</u> : I am the Associate Commissioner for Acquisition and Grants and as Mr. Mathur and Mr. Brune both mentioned, we do extensive market research. The acquisition team, which includes the Contracting Officer, the Contracting Officer's technical representative, are required to and do a review of all the product in a particular marketspace. As Rajive said, the policy is cloud first, COTS first. The teams are required to document their analysis and do extensive market research. Mr. Brune also mentioned the possibility of Industry Days. We have done that in the past for specific procurement actions. We will continue to do so depending on the particular acquisition. We are going to do those mostly in our larger acquisitions. It is not cost effective to put together a large Industry Day activity for a smaller acquisition, but something with lots of industry attention and high dollar value, an importance to the agency, we are going to do an Industry Day and get immediate input from the industry. What we normally do for your average procurement is an RFI where we seek capability statements. We seek information from the industry on things that will help us to develop our requirement.
		• <u>Mr. Mathur</u> : Thank you for the feedback we have received on this event. If we can find a way to operationalize this and get less of a lift every time, if we can do this in a way that is appropriate for the right business verticals or product verticals, it will be a nice way for us to engage.
8.	Can you just confirm that the work management business requirement covers Title II and Title XVI exclusively?	• <u>Mr. Lemon</u> : Yes, those are the primary agency programs under the work management umbrella.
9.	The follow-up to that is what would you say the unique challenge are of those business domains compared to the other areas as it relates to modernization?	 <u>Mr. Lemon</u>: That is a great question. One of the key aspects I think relate to the complexity of the two programs by nature again going back to how they are legislatively constructed and the automation and the modernization is, a reflection of that complexity. There are multiple ways to become entitled. There are computations that are very complex in nature that help determine a benefit payment amount. The systems themselves have served us well. They have been refreshed in cases; however, in some other instances, they need to be modernized, as they have outlived their design. The other aspect is balancing the continuity with the change because while we are modernizing, we have to continue to provide the critical services of the right payment to the right person at the right time. We have to account for everything that we do today and tomorrow in modernization. <u>Mr. Brune</u>: Our work management for now is hardcoded into roughly 24 million lines of COBOL programming language that has evolved over

	decades that codifies and administers nearly eight decades of statutory, regulatory program policy updates. Those have been in different frequencies but policy updates have been regular. The automation enforces program rules. The COBOL code has those program rules as well as work management as well as decision support all in the same code base together. We have no alternate system to process this work. Any claim, any post- entitlement action for a beneficiary on the rolls right now, it goes through our Modernized Claim System (MCS) and Modernized Supplemental Security Income Claims System (MSSICS) process and data is pulled from many legacy data applications. On the Title II side, we have 128 supporting applications. The ecosystem of software is rather substantial and the volume of transactions is rather substantial. The supporting applications that I mentioned are written in multiple different programing languages in addition to COBOL. Often the data that is collected in one application and then years may go by before we, access that data again for a business purpose. When Mr. Lemon references the complexity, when we change workload management for our core systems, we have to evaluate and test how that change will impact the other software environment. It is very much the case that changes on Title II programming systems may have impact on Title XVI and vice versa.
10. In terms of prioritization, in relation to work management, is there a process to sort of understand how to prioritize within Title II and what you actually tackle initially and how to roll out some of these changes so that you don't disrupt the business?	• <u>Mr. Brune</u> : The approach right now is to take a comprehensive view of both Title II and Title XVI together. Our approach at present is a business-oriented workflow. When a potential claimant calls or visits, we are working through that pre-claim claim process through adjudication and award, post-entitlement activity in that sequential order. We are also taking an enterprise architecture view as well to make sure that the underlying infrastructure is in place and modernized before the benefit systems will need to access it.
	• <u>Mr. Lemon</u> : We have talked about the fact that modernization is two sides of the same coin, adding business value and the act of modernizing the software in our systems. The business identifies specific pain points and concerns that need to be addressed – and this influences what we would tackle first. The business value and modernization hand in hand in informing the steps in our modernization plan.

Electronic Health Records

Presenter: Mr. Jude Soundararajan - Executive Director, Heath IT, Office of Systems

	Question	Response
1.	What data exchange platforms will be used for electronic health records and will there be interfaces for beneficiaries to view their records?	<u>Mr. Soundararajan:</u> SSA leverages national health IT standards recommended by the Office of the National Coordinator for Health IT to securely and safely exchange electronic health information. We use a number of methods to interoperate electronically, such as the eHealth Exchange run by The Sequoia Project to facilitate exchange of standardized data formats. Currently, we work in varying degrees with a number of the national interoperability networks. In addition to being a production member of the eHealth Exchange, we are also general members of CareQuality and CommonWell Health Alliance. We are working closely with these networks to further our reach to healthcare providers that can provide electronic health information for the disability process. Now, the second question is about viewing records. At this time, we do not provide a capability for claimants or beneficiaries to use these types of interfaces to have access to their records. That may be something we look into in the future; however, we do not have any facilities like that envisioned at this time.
2.	What plans does SSA have to modernize national medical evidence collection at the enterprise level? Will SSA drive a national medical evidence collection program? If so, how will it develop requirements, and when?	 <u>Mr. Soundararajan:</u> Our overall strategy is to increase the number of healthcare organizations sharing complete structured electronic health information with SSA for the disability determination process. We have multiple approaches to support this strategy. We are looking to expand our reach beyond the eHealth Exchange (our initial interoperability network) to other networks such as Care Quality and Common Well Health Alliance. We continue to share our requirements with healthcare organizations, HIEs, and health IT vendors to show them the value that they could see by interoperating with SSA, such as transaction payments, operational savings, and cost recovery of uncompensated care. We remain focused by having a voice at various standards, technical, policy, and operational tables to ensure our requirements are included to obtain richer, more complete electronic health information. We continue to be focused on current and emerging health IT standards such as FHIR and C-CDA. Lastly, we are exploring other means to obtain electronic health information throughout the disability process. This includes how we might obtain records directly from the patients themselves through apps or their personal health records, how we might receive updates of clinical encounters rather than relying solely on the traditional query-response mechanisms, and additional methods to motivate the marketplace to accelerate sharing of electronic health information with us. There are protocols like FHIR and HL7 that are working to normalize content syntax and semantics across the healthcare marketplace. We would also like to encourage the consumerization of health data. The consumers own their own health data. I think one thing that we can strive for is that patients have the rights to their data and its use within the healthcare marketplace. As part of our initiatives to better communicate our requirements for data exchange, we are also going to launch a GitHub site with the content standards SSA requires to adjudicate disabil

3. You mentioned the HL7 protocol. Is this something that you guys are actually actively collecting a lot of data and two other protocols that are very important in the medical industry are Diacom for medical images and also the ICA protocol to actually view remote apps? Are these two other protocols that you guys are using in your environment?	 with Congress, the ONC, private partners, and large EHRs to share our needs and come to common standards that we believe will help grow the exchange of clinical information as data. Mr. Soundararajan: We are participating in and encouraging the acceleration of national standards that support use cases similar to SSA's. We plan to adopt these standards as they are developed to do our part to move the industry to data-based exchange of clinical records, namely notes. Mr. Soundararajan: We use a variety of standards, including HL7, for both transportation and document structure. SSA is deeply engaged with using national Health IT standards such as HL7 C-CDA, FHIR and IHE specifications. We have been actively involved in the community for over a decade and a half as standards have emerged and matured. Our focus is to ensure that the standards meet our requirements to share a patient's authorization and obtain complete, consistent electronic health information. As far as the DICOM (Digital Imaging and Communications in Medicine) international standard to transmit, store, retrieve, print, process, and display medical imaging, we do not require diagnostic images such as x-rays. We have
	 scans or MRIS. Rather, we need the interpretations of such images. We have worked with RSNA Image Share effort and IHE specifications to access the interpretation as part of image exchange efforts. Regarding the ICA protocol (assuming this refers to Citrix), we hesitate to perform one-off connections to organizations. Such connections require that we support credential management, training, data sharing agreements, and security for each and every connection to a healthcare organization or HIE. This would be a heavy burden for the agency and connected partners. Mr. Fry: Those standards are mostly used for reviewing images. We are looking at and researching to determine other methods that are out there. While it is valuable for us to have access to an image, what is really important to us is the clinicians' interpretation of that image. We are looking at what is important for us, where the value is, and how those standards – along with some of the new things that are coming out, like FHIR and consumer directed exchange – can be leveraged to aid in the agency's mission.
4. With regard to the \$200 million spend for information that you referenced in the brief, do you have any line of sight or can you provide any additional granularity on in addition to that spend or that cost - the other cost associated with managing the backlog and processing these requests so that you can begin to quantify what the value proposition would be to SSA in solving this problem.	 <u>Mr. Soundararajan</u>: We are looking at that. We have spent half a billion dollars if you look at our total medical acquisition costs annually. The \$200 million_is in reference to the collection of medical records, while the remainder covers consultative examinations. <u>Mr. Fry</u>: I think you are also asking, what do we spend on those consultative exams? What are we spending for a paper request? What are we spending to scan that in? What are we spending on personnel? The \$200 million number that was referenced previously is an aggregate amount for the direct payments to healthcare entities only. We have it down specifically as a business process for what we spend for folks that are out in the field that are part of the requesting so they do the other jobs in the DDS and our folks on the front line. We are spending somewhere near about half a billion dollars to acquire evidence and pay folks to obtain that evidence and that includes consultative exams. <u>Mr. Soundararajan</u>: Yes, those are aggregate costs. The consultative exams are called for when we do not get medical records and we have to send a disability claimant to a clinician. Those can really drive our costs because we are paying for the medical exam too.

5.	Just roughly, what percentage of the claimants that require additional evidence require an exam?	Mr. Soundararajan: Approximately 27 percent.
6.	Once again so I'm clear. So the inability to determine a disability benefit through medical evidence gathered in the form of medical records, 20 percent of the time require the claimant to submit to a physical to determine or confirm the disability?	Mr. Soundararajan: Yes, that is approximately correct. When we have to call for a consultative exam, either we do not have any records or the records received are insufficient to determine disability. These are several situations where we do not receive or have medical records available. For example, the claimant may not have sought medical treatment for their condition, the patient misidentified the treating sources, and the provider might not respond in a timely manner or at all with the medical records. When this occurs, we are required to order a consultative exam, which is costly for us, causes a burden on the claimant, and increases the time to make a decision on a claim by having to schedule an appointment for this examination and then have the claimant see the consultative exam provider. By using health IT to obtain this information almost immediately and in formats that are consistent and provide rich information, we have seen provider response
		rates goes up and evidence acquisition times go down. This means fewer consultative exams. This has resulted in decreases in overall case processing times where health IT is used to obtain electronic health information. The more clinical records that SSA can receive as data in an automated, structured format containing the depth of clinical notes needed to adjudicate disability, the more the agency is able to speed up the adjudicative process and lower the cost to the taxpayer.
7.	The second question that we have with regard to the backlog of approximately \$1.4 million disability claims. Can you provide any additional granularity on the circumstances that are driving that backlog? Is it solely a result of insufficient evidence? Is it largely due to the inability to access discrete data because of the nature in which it's coming to you fax, paper, etc.? Could you characterize that in a little bit more detail?	 <u>Mr. Brune</u>: That refers directly to the claims that are pending decision by the administrative appellate judge at our hearing and appeals level and we have actually made some progress there this year and we are around below one million pending now. You know it relates not merely the evidenced to acquisition but it also relates to volume of receipts, as well as capacity on hand to conduct hearings and write decisions for those hearings. Certainly the efficiency of having updated evidence helps to process hearings more timely and our evidence acquisitions strategy, our health IT records acquisition is part of that business process enhancement that we are making. It is certainly possible for a claimant who has been denied at an initial claim level to have new evidence by the time they get to a hearing level. We are confident that we have all the necessary information to adjudicate a claim at the initial claim level, but then if a claimant elects to file for reconsideration, or a subsequently for an appeal, there is time that passes to allow for due process and you know the fastest the process can run is roughly, nine to 12 months.
		 <u>Mr. Fry</u>: Some of that time is related to the programmatic requirements necessary to establish the disability decision at the appellate levels of consideration. The evidence also becomes more robust downstream and so these claims take additional time to adjudicate. <u>Mr. Brune</u>: But the answer to your question is the access to current
		 <u>Mr. Drute</u>. But the answer to your question is the access to earleft electronic health records is one of multiple drivers for that backlog. <u>Mr. Soundararajan</u>: As we increase the amount of electronic health records, we move from the 10 percent that we get now it is going to speed up that process because obviously getting these records takes time, and in automating this process the resources that would be used collecting records can be turned to other high value work. Our focus is to make sure we get the right data at the right time to support the right decision.

		• <u>Mr. Mathur</u> : There is one other element that I would like to point out. There is getting the record in machine readable format which is important and so that format, making sure that it is useable downstream in our processing. There is also the quality of the content. So meaningful use is meaningful use but it needs to be uniquely used for us to say and that may be different. So it is important to note that and I think that is an important requirement in addition to the format that how do we define quality? How do we define the content? How do we access it, kind of on an operational basis? These are all really important tough, questions that need to be automated.
8.	You are doing some innovative work utilizing things like natural language processing and AI to try and abstract relevant clinical data out of unstructured data. Can you elaborate a little bit more on what kind of results you have seen through that effort and what you envision going forward?	 <u>Mr. Fry:</u> Currently, we have created business rules based on our listing requirements, which are available to the public. They tell you what our program needs to be able to consider you disabled and we have these broken out across various body systems that can be assessed for disability claimants. For example, if you have cancer, what type of cancer? What type of metastasis needs to occur for our program to consider you disabled? We have built business rules, which are algorithms that look at ICD-9 and ICD-10 codes to let an examiner know if and where there might be information within the evidence that is relevant to a possible allowance. We are undertaking this process while we are looking at NLP and even AI. As we receive this as data, can we look at the actual work? Can we look at the clinical terms? Can we look at the way that they are applied in a structure of a sentence? Or the meaning within a summary or a discharge summary and can we take that and look longitudinally and apply that again to our listing levels and also some of these other program requirements that we have for what we know about a person, their age, the past work experience. Preliminary we are at the stage where we have been able to define many of the terms that are relevant to our adjudication process, so we can now search across the information very quickly using a tool that are being tested out right now with the examiners.
		sense and then there is how you insert it the business process. These are two different things and two different steps and it is still early in our approach.
9.	Could I just ask you to clarify one thing? You mentioned that these HL7 business rules are available. Can you just provide a little more context on that?	<u>Mr. Fry:</u> Our current health IT system called MEGAHIT (Medical Evidence gathering and Analysis using Health IT) uses a set of disability impairment business rules that are based on the SSA Blue Book of disability impairment listings. Our Blue Book is available to the public online. It should be noted that not every impairment listed in the Blue Book has an associated set of business rules today. The business rules examine the structured data with the electronic health record, looking at diagnostic and procedure codes such as ICD-9, ICD-10, SNOMED-CT and CPT codes. The business rules are not currently made available.
10.	With regard to solving some of these larger business problems, in partnership with industry and how you actually execute on engaging with industry to implement solutions. You mentioned a couple of metrics that you're tracking. The backlog, the cost, the speed with which these claims are being processed to get to an endpoint	<u>Mr. Binstock</u> : A share and savings kind of contract where the vendors pay is related to how much SSA saves in its program activity. SSA has not participated in that kind of a procurement model; however, we would consider it in a specific circumstance. We know how to do it; we just have not had an opportunity yet to do it.

	which is the determination of the disability benefit. These are the metrics that you are tracking. Has SSA ever or would SSA consider entering into a shared risk model with a business partner where performance would translate into some type of a contract structure I guess is the question. But I guess it's a shared risk acquisition model where a business partner could solve that problem.	
11.	Where does this business problem around sort of the ingestion and acquisition of clinical information intersect with DCPS and do you guys have any insights into DCPS relative to the IC modernization efforts that this overall call is discussing?	• <u>Mr. Brune</u> : The health information technology acquisition of electronic medical records as Mr. Soundararajan described is an enterprise level effort. It applies to all levels of adjudication. Initial consideration, hearing, appeal, and I think as Mr. Fry spoke is what we are interested in is getting as much electronic evidence upfront as early in the business process as possible and running automated intelligence against that in order to provide decision support to our adjudicators from the initial claim level all the way through hearings and appeals.
12.	Just a question regarding slide 40 and your challenges around the ingest and profit and making structure and unstructured data available to the upstream applications. Are there any RFI's planned or engagements with industry on talking around and presenting potential platform solutions for this challenge?	 <u>Mr. Soundararajan</u>: There is an RFI that will be coming out shortly focused on this issue on ingestion of unstructured and our needs around unstructured data. <u>Mr. Binstock</u>: The RFI for health care records should be coming out in the very near future, probably within the week.

Workflow Management and Business Process Management Technology

Presenter: Mr. Jian Wang- Chief Engineer, IT Modernization

	Question	Response
1.	Please discuss the role of open source software in your modernization effort.	• <u>Mr. Wang</u> : We follow OMB recommendation on both the COTS review versus leverage existing component, both Mr. Mathur and Mr. Brune m mentioned our policy on COTS. The open source is really when we do a custom view we highly promote goals with open source and that is not just as you know a choice, it is really to promote the common best practices in our IT modernization. So for example, in the workflow and BPMN area we had a concept last year on JPBM software which is managed by Red Hat and this year we will do another POC using Comondo that is another open source for BPMN. We will continue to explore open source products on the workflow management and BPM. In parallel, we are exploring all possibilities.
2.	I'm wondering whether social security is still planning to develop a consolidated enterprise database and what if anything is currently being done with that and we're not sure what the next steps might be?	 <u>Mr. Wang</u>: The idea behind the Consolidated Enterprise Database is to organize the agency's data around a person/customer, essentially enabling users to have a person-centric view of data by creating the ability to integrate data from disparate data stores. The project entails the reorganizing of data in existing data stores and removal of legacy software that creates an artificial barrier for applications to achieve this integrated view. We do have a strong data strategy. For example, we created the Enterprise Data Warehouse (EDW). We put most of the major data in this warehouse. We used a massive power up processing platform to allow us to do extensive data analysis, data exchange and all kinds of reporting. So, we do have a strategy on that and also as part of the IT modernization, we actually are very successful at migrating a lot of legacy data from IBM prepared to like QSAM, VSAM into our relational data base such as DB2 or other similar commercial relational databases.
3.	My understanding was that the enterprise data warehouse was going to be for the legacy data but the consolidated enterprise database so that was originally discussed was it was going to be for ongoing current needs. Is EDW going to be used for current needs?	 <u>Mr. Wang</u>: EDW is more service though data warehouse for the heavy lifting kind of things. We do have a transactional database, which is running on the IBM mainframe, on DB2, because the transactional processing requires different features on a database then the analysis and data exchange platform. <u>Mr. Brune</u>: EDW is provisioning data primarily for public intelligence, management information purposes. This is still ongoing and we are adding more datasets into the EDW as our data strategy evolves.

<u>Closing</u>

Presenter: Mr. Seth Binstock– Associate Commissioner, Office of Budget, Finance, and Management, Office of Acquisition and Grants (OAG)

	Question	Response
1.	Can you share information about the procurement vehicle(s) that you anticipate using to support your IT modernization initiatives?	<u>Mr. Binstock</u> : I encourage you to go to the Office of Acquisition and Grants (OAG) website: <u>www.ssa.gov/oag/</u> . This website includes very helpful information about doing business with SSA such as how to submit your capability statement to our vendor repository.
2.	In your discussion on the procurement process can you please address what aspects of the modernization will be available for small businesses and what contracts vehicles have been identified for these procurements.	The vendor repository is an internal agency SharePoint site that our contracting officers and contracting officer representatives used to conduct market research: <u>www.ssa.gov/oag/Vendor_Repository.pdf</u> . The OAG website also includes information about recent contracting activity and if you can just click on the Freedom of Information Act (FOIA) tab and you will be able to search by contractor name, contract number and even by the award description.
3. 4.	For all upcoming proposals is Outsourcing an option?	 The search will provide the contractor's name, contract number, description, award type such as delivery order, purchase order, blank purchase agreement, call order or contract. It includes the award date, the obligated amount and the completion date. You can also go to the Office of Small and Disadvantaged Business Utilization (OSDBU) webpage. You can go to their webpage from the OAG website to find contracting forecast and the subcontracting directory and information about how to sign up for the OSDBU monthly vendor outreach section.
5.	If a forecast of opportunities is presented, please ensure that to the maximum extent possible, set aside information is provided.	Wayne McDonald, who is our agency's OSDBU director, holds free monthly vendor outreach sessions the third Wednesday of each month. If you have not done so and you are a small business, I would encourage you to sign up to attend.
		Our website also describes the unsolicited proposal process. A valid unsolicited proposal must be something that is innovative and unique, independently originated and developed by the author, be prepared without government supervision, endorsement, direction or direct government involvement. Includes sufficient detail to allow us to say to decide that support could be worthwhile and the proposed work could benefit the agency's research and development or other mission responsibilities.
		It cannot be an advanced proposal for a known requirement that can be acquired by competitive methods and it cannot be addressing a previously published agency requirement.
		There is another way, a good way to get your company in front of SSA. Act as a subcontractor on one of our existing contract vehicles. For support services, we have two vehicles, the Informational Technology Support Services Contract (ITSSC) and the small business version of the ITSSC.
		If you partner with one of the contractor holders, you can gain SSA experience and past performance which will help you in obtaining future SSA contracts. As mentioned before, one of the questions I received was a request to share information about the procurement vehicles we will use to support IT modernization initiatives.
		One of the administration's priorities is category management. One element is to reduce the number of duplicative contract vehicles. I am the accountable officer for category management and it is my job is to make

sure that if there is a best in class or an existing contract vehicle, we use that vehicle rather than creating a new one.
To the extent that I can answer this question depends on the specific requirement. If the requirement is primarily a hardware or software buy, we will use GSA schedules or one of the other existing contract vehicles.
If the requirement is IT support services, we are most likely going to use our existing vehicles.
If it is a new product, we will look at the market and make a decision about how to conduct procurement at the point when the requirements are defined. To answer the question about set asides, the answer is I do not know yet. If we are not going to use an existing vehicle, we will look at the market before we make any set aside decisions and again that is when the requirements are fixed.
Lastly, I do want to leave you with some specific upcoming IT procurement activities that you might be interested in: an RFI for health care record should be coming out in the very near future and the small business support services requirement, RFP, will be released toward the end of July or the beginning of August.