

National Technical Information Service (NTIS)
Advisory Board Meeting Minutes
June 29, 2020
Held at 5301 Shawnee Road, Alexandria, Virginia 22312

Attendance

The following board members participated in the meeting: Dr. Ajit Gaddam, Advisory Board Chair, Mr. Aaron D. Burciaga, Ms. Claire L. Walsh and Ms. Diana M. Zavala.

NTIS senior staff participation included Mr. Avi Bender, Director, Mr. Greg Capella, Deputy Director, Associate Director Ms. Elizabeth Shaw, Acting Associate Director Mr. Wayne Strickland and Chakib Chraibi, Acting Chief Information Officer Ms. Allison McCall, and Deputy Financial Officer Ms. Andrea Patterson.

Welcome/Opening Remarks

Mr. Greg Capella, the NTIS Advisory Board Designated Federal Officer (DFO), called the meeting to order and welcomed the NTIS board members and NTIS staff, and public attendee. Mr. Capella then briefly reviewed the agenda for the meeting and turned the meeting over to Dr. Gaddam to introduce the new board members.

Mr Capella walked through the agenda for the day, shown below.

NTIS ADVISORY BOARD (Virtual)

National Technical Information Service

877-915-5502 PIN 2786080

June 29, 2020

AGENDA

I. NTIS Mission and Operational Update

1:00 PM	Call to Order and Introductions of Board Members- Greg Capella, Deputy Director and DFO; Dr. Ajit Gaddam, Advisory Board Chair
1:30 PM	NTIS Update Avi Bender, Director, NTIS, US Department of Commerce
2:00 PM	Operations of the Service and Lines of Business Overview- Greg Capella, Deputy Director <ul style="list-style-type: none">• Elizabeth Shaw, Office of Program Development• Wayne Strickland, Office of Program Management• Dr. Chakib Chraibi, Office of Data Services• Allison McCall, Acting Chief Information Officer• Andrea Patterson, Deputy Chief Information Officer
2:50 PM	10 minute break

II. Discussion with Board Members

3:00 PM- 4:00 PM	Advisory Board Discussion with NTIS <ul style="list-style-type: none">• Progress on implementing the new data mission• Guidance on the operation of the Service
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III. Summary and Close

4:00 PM- 4:15 PM	Review Feedback and Action Items
4:15 PM	Member wrap up discussion and public comment

IV. Meeting Adjourns 4:30 PM

Dr. Gaddam welcomed the board members and each board member introduced themselves and provided introductory remarks. Dr. Gaddam stated that a video conference would be more effective if we needed to continue socially distance and NTIS concurred and state that the video conferencing services was now purchased, and a video conference would be our preferred approach going forward.

NTIS senior staff, starting with Mr. Capella and Mr. Bender also introduced themselves and gave a brief summary of their backgrounds. The only change in the NTIS senior leadership was Dr. Chraibi introduced himself and his new role as the acting Associate Director for Data Science.

Director's Overview

Mr. Bender began the discussion by providing a context and differentiation of the NTIS data services and the NTIS value proposition.

He stated that the Federal government has a number of important capabilities to assist agencies in driving IT modernization through data analytics- in particular support from the GSA, USDS, 18F, FFRDC's, and various agencies own contracting and OTA capabilities. But he pointed out that the NTIS's Joint Venture authority is unique, by Law, in the Federal Government. NTIS has applied this Authority to create an innovation framework, focused on data, to enable agencies to leverage data as a strategic asset for achieving mission outcome. The JVP Authority is founded on collaboration between government and the private sector. NTIS JV partnerships are inherently flexible, scalable and powerful, and the JV authority allows innovation in the delivery of government data and data services, consistent with the vision of the Administration's American Technology Council and Office of American Innovation.

Innovation, driven by design thinking, typically occurs in a consultative process of Ideate-Conceptualize and Implement. but what's unique to NTIS – and this has resonated with our sponsoring agencies- is how we engage the private sector in the “pre-solicitation phase” to assist the sponsoring agency in formulating the problem statement. The inclusion of the private sector and NTIS in this early design thinking stage, provides the sponsoring agency with diverse thinking and viewpoints that ultimately lead to a more focused problem statement. This approach, enabled by the NTIS, is difficult to achieve under the FAR.

Mr. Bender also stated that during the onset of covid-19, many agencies were scrambling to collect, evaluate, prescribe and predict the health and potential economic impact across the nation. The NTIS was already positioned to support agencies mission critical data requirements through its unique authority. NTIS has existing partnerships and legal agreements with pre-vetted data and AI private sector organizations. In fact, the very data analytic skills and capabilities sought after by the government were already being applied across the Federal government by NTIS and its private sector partners using its unique authority. The NTIS has assisted the JAIC in standing up their AI capabilities. The NTIS is assisting OPM in AI enabled natural language processing (NLP) to improve future talent management. The NTIS is assisting the Department of Homeland Security and the Department of Energy NNSA on mission critical national infrastructure risk management. Avi discussed the availability of common “reference architectures” that he sees across the many projects that NTIS is supporting. He sees both critical challenges and opportunities for cross government collaboration and continuing to build on current platforms and capabilities for the benefit of all agencies. While NTIS has made significant strides in executing it new mission, knowledge of the NTIS value proposition across the Federal government is limited.

Mr. Bender then provided a high-level YTD summary.

NTIS Summary of Strategy and Business Operations YTD FY 2020

- NTIS successfully executed its Continuity of Operations Plan (COOP) in early March 2019 and operations continue today at a maximum telework status. The NTIS team has demonstrated remarkable resilience and dedication to the mission of NTIS under these very difficult circumstances. As a Federal fee for service organization, without any appropriations, we do not have a safety net and must continue to operate as an entrepreneurial start-up organization.
- NTIS FY20 YTD Revenue is at \$35.1M with a projected year end revenue of \$76.9M. The balance in the Revolving Fund is anticipated to be \$5.6M at year end. The net loss for FY 20 is projected to be about \$600K. Despite the global pandemic that is affecting our federal data services market, FY 20 will be our best year since the launch of NTIS 2.0 in 2016. We are financially solvent and are delivering on the NTIS 2.0 Mission.
- NTIS has been reorganized around three business units that include our Subscription and Assistive Data Services, the Data Science Analytic Services, and the NTRL Repository Information Service. We now have an impactful portfolio of Joint Venture Partnership projects that are driving innovation across the Federal government. These projects and their significance are summarized in the recently published Data Driven Innovation at Scale- Applied Data Science Use Cases May 2019.
- Our business model continues to be a Value-Add Reseller with emphasis on the Value Add. We succeed when we partner with the agency by working together to own the outcome of the customer relationship and customer demand. The "demand" is understood through the NTIS Innovation Framework that applies a design thinking methodology to understand the customer and to ultimately deliver solutions with our JVP's.

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- Net new business (new accounts) for NTIS in FY 20 is \$0 YTD. Revenue from existing accounts and follow on work is \$35.1M YTD. The NTIS pipeline of new agreements is weak given a significant disruption in our ability to conduct new meetings and workshops. Meetings have been cancelled as agency priorities are being refocused due to Covid-19. Selling the NTIS services via conference calls is not optimal. We are, however, getting interest and traction from existing accounts where our customer satisfaction remains high and our value proposition is understood.
- For all new business, the NTIS is considering a revenue share increase of 10% and would like the Advisory Board input on this approach.
- NTIS headcount is now at 40 staff and this represents a 33% reduction from last year and an overall 60% reduction since FY 2016. We are operating more efficiently and with greater productivity per employee. We will have to hire a few additional staff (Q1 2021) with unique skills in data science and project delivery.
- The NTIS cloud migration, and further provisioning of our IT infrastructure in the cloud, positioned NTIS to support both its internal and customer staff during the Covid-19 outbreak and into the future. Transition to CBS (financials) is progressing well at this writing with support from the NIST CFO.
- Outreach efforts are very positive as we plan post Covid-19. NTIS has been selected as an ACT-IAC Ignite Innovation Finalist. The ACT-IAC, AFCEA, and ATARC have reached out to NTIS to participate with our client agencies at their high visibility educational events. These events are being postponed to Q1 2021 and will be virtual.
- On December 13th, 2019 NTIS published a Federal Register Notice inviting new private sector partner to join NTIS.

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Mr. Bender concluded his opening remarks by asking the Board to discuss:

- Strategies to achieve great customer demand
- Growth strategies, as a fee for service organization, during this global pandemic
- Extracting greater value from our NTRL

During Mr. Bender's discussion the board members made a number of suggestions. Dr. Gaddam stated that he would be pleased to introduce NTIS to organizations that could benefit from NTIS

unique capabilities. Mr. Burciaga echoed this sentiment and stated that he had multiple warm introductions he could assist NTIS. Ms. Zavala noted the improved financial picture for NTIS and noted that ACT-IAC would be an excellent organization to help build NTIS brand. In addition, she mentioned that we should engage with the Executive Leadership Conference in October 2020.

Mr. Burciaga stated that to be effective in our outreach NTIS should create case studies that highlighted challenges and results from our work, as well as a one pager that captures potential customer's attention. And NTIS should have a 30 second summary of what we are and why a customer should engage with NTIS. NTIS stated it had case studies and one pager that we would share with the board. Mr. Capella sent this to Dr. Gaddam after the meeting to share with the board members.

Dr. Gaddam asked how work to leverage the NTRL to provide new products and services was going. He mentioned the US Secret Service had data that might augment the NTRL and asked whether NTIS was trying to obtain unemployment data to support COVID-19 responses. Mr. Strickland stated that NTIS does not have that data and that we are not actively looking to grow the repository at this time, although we are continuing to enhance the NTRL with currently federal sources. The reason that NTIS is not actively looking at growing the repository is that it is solely funded by NTIS without any appropriations to cover the costs. Any growth would be at NTIS expense.

A discussion ensued on NTIS support of various COVID-19 opportunities with all board members engaging and Mr. Bender stated that NTIS had engaged with multiple Federal agencies to offer our support but these agencies were mostly expanding existing capabilities with the new funding, not looking at new approaches such as NTIS. Mr. Bender stated that NTIS was looking at re-engaging with HHS and other organizations on helping their response and had requested new appropriations be provided to NTIS that could be leveraged for this and other actions.

Mr. Burciaga stated that multiple organizations that he has interactions with, such as John Hopkins and Pfizer Corporation might be new leads for NTIS, and he would be happy to make introductions.

Mr. Bender discussed a concept of producing a common platform for analytics for supporting COVID-19 and other issues when they occur. He referenced the funding request that NTIS would use to support this platform.

Mr. Burciaga asked if we could work with state and local governments on the pandemic as well as federal agencies and Mr. Benders stated that we are limited to supporting federal agencies.

Ms. Zavala mentioned that that workshops around data literacy, ethics, and privacy assessments are areas that NTIS should consider as potential new target for federal services as these appear to be under served currently.

Dr. Chraibi described the Department of Commerce Data Board which he supports, and which included a focus of data governance and literacy as part of their charter.

Dr. Gaddam asked about how the board supports the innovation in data science in the federal government and Dr. Chraibi discussed what the board was pursuing over time.

Operations of the Service and Lines of Business Overview

Mr. Capella reviewed for the board members the NTIS organization and the five lines of business that NTIS currently provides. The NTIS organization had not changed from the last meeting however Chakib Chraibi was again highlighted as the acting Associate Director for Data Science.

Mr. Capella then described the process that NTIS undertook to right size its staff to meet its new mission and as it discontinued its prior activities that were not aligned. Leveraging Voluntary Early Retirement and Voluntary Separation Incentive programs, NTIS reduced its Federal staffing from 100 members in September 2016 to 60 in July 2019. Unfortunately, these voluntary programs were not sufficient to complete the right size the NTIS staffing and NTIS conducted a Reduction in Force (RIF) in January 2020 to bring the total Federal staffing level to 40. Fortunately, all outplace staff received other Federal positions if they desire them during the RIF.

The lines of business continue to include the Data Science Innovation, Data Accessibility, and Data Subscription services, as well as, the Technical Clearing House and Legacy Business. Mr. Capella stated that the last of the legacy business, which the NTIS Oversight Board defined as projects that were not-aligned with the NTIS new mission, were expected to end this fiscal year, unless the Federal agencies could not replace NTIS services in time.

Next Ms. Shaw, Associate Director, Office of Program Development, described her organization, and how her team supported the NTIS mission by identifying new opportunities for NTIS support and how her staff works in concert with the Program Management and Data Science organizations to implement projects. Ms. Shaw discussed the activities her team undertakes in their role and then discussed various opportunities that NTIS is pursuing at 14 separate Federal agencies including the Defense Department and numerous civilian agencies.

Ms. Shaw then discussed three ongoing, high impact projects that are making significant impacts with NTIS customers and one project about to start. The ongoing projects included the Office of Personnel Management, Department of Homeland Security (DHS) Program Accountability and Risk office, and DHS National Risk Management Center while NTIS is about to start a new project with the Veterans Administration.

Ms. Shaw closed by describing the upcoming ACT – IAC event on Sept 2,2020 where NTIS is competing for an Igniting Innovation award. She also discussed the upcoming AFCEA for Tech Summit on Oct 14-15, 2020, where NTIS will help host the event demonstrating our continued work to establish our brand.

Mr. Strickland, Acting Associate Director, Office of Program Management, described his organization and the adjustments he made to his management structure. Mr. Strickland then

refreshed the board about the three main activities for his organization, managing the Technical Clearing House for NTIS and providing Data Subscription services. Managing the Technical Clearing House includes providing Federal and public individuals and organizations access to the National Technical Reports Library (NTRL), which contains over 3 million documents of which approximately 1 million are digitized and online. Mr. Strickland noted that the library is continuing to grow and that NTIS provides this service as a free service to the public. Mr. Strickland discussed ongoing efforts to leverage our internally developed site for DEA CSA data and that this was impacting NTIS earnings.

Mr. Burciaga asked if the DEA or LADMF data might be leveraged to provide additional services. Mr. Strickland stated that the data was not ours and that NTIS provides access to the data.

Dr. Chraibi described the data services he and Dr. Lee provide and discussed the many ways his team is supporting NTIS. He also walked through how data science is fundamental to not only NTIS but to most federal and commercial practices. Dr. Chraibi discussed the hierarchy of data needs all organizations face and how NTIS might assist organizations improve their data science undertakings.

Ms. Zavala proposed putting NTIS in contact with USDA CDO Ted Kaouk, who is USDA CDO and now will lead the federal CDO council. She recommended participation to the ACT-IAC Executive Leadership Conference (Oct. 26-29). Ms. Shaw shared that NTIS had already reached out previously to Mr. Kaouk and would appreciate an introduction.

Dr. Gaddam mentioned privacy issues with AI-based face recognition and Ms. Zavala and Mr. Burciaga raised issues as well as about ethics. These are areas that federal agencies would need to tackle as they embrace emerging technologies.

Ms. McCall, the Acting Chief Information Officer, described her organization next, and gave a brief overview of her senior staff. Ms. McCall stated that her organization had been significantly impacted by the RIF but that they are working to manage the current infrastructure while they are migrating most services to a Cloud provider. Ms. McCall then described how as NTIS was shifting from its prior mission, which included hosting applications for other Federal agencies as an example. She then reviewed how NTIS expects to migrate much of its infrastructure to the Cloud to help reduce costs and increase availability. She stated that NTIS migrated its backup site from Denver to a Cloud provider, although this has been impacted by the pandemic, and that NTIS is focused on completing the migration of services to the Cloud as soon as possible.

Dr. Gaddam stated that NTIS should consider not going to just one Cloud provider so that it could avoid vendor lock in. Ms. McCall agreed that it would be a NTIS goal to avoid lock in and that after the initial migration of NTIS to the Cloud she would look at how NTIS might diversify its Cloud services.

Ms. Patterson, the Deputy Chief Financial Officer, described her organization next, and gave a brief overview of her senior staff. Ms. Patterson gave an overview of her team and their functions. Next Ms. Patterson provided NTIS financial status as of the second quarter fiscal year

close, and the revised forecast for FY 20 which showed a \$0.6 million loss on operations. Ms. Patterson stated that this was a significant improvement over the beginning of the year forecast and reflected reductions in cost, especially in staffing costs, and some improvements in revenues over the forecast. Ms. Patterson also described how NTIS with the help of NIST was migrating this fiscal year off of some of its home-grown financial systems and onto the Departments financial system, the Commerce Business Systems.

Dr. Gaddam asked why NTIS would end its legacy products if they were profitable. Mr. Capella stated that in 2015-2016 a Department appointed Oversight Board reviewed all NTIS ongoing work and determined which were aligned to the new NTIS mission. They had labeled some projects as not aligned. As a result, customers were told to seek other providers and the last one is now migrating off of NTIS infrastructure to another provider.

Advisory Board Discussions with NTIS

After a short break, the Advisory board came back into session to discuss what had been heard and provide additional feedback.

Mr. Burciaga asked what NTIS saw when it looked at the suggestions, he provided at the last board on obtaining more value from the NTRL, and on ethical AI, IV and V and governance. Mr. Strickland addressed how his team had reached out to NOAA and had discussed how they might leverage their services for NTRL. Unfortunately, it was found to be not viable. Mr. Burciaga offered to introduce contacts at the General Services Administration (GSA) that may be of assistance for highlighting the value of the NTRL. Dr. Chraibi discussed how the Commerce Data Board as part of its charter is to define an ethical framework for AI in the Department.

Mr. Burciaga asked what data service types NTIS was providing and did NTIS consider analytics as a service? Mr. Bender stated that analytics as a service was definitely part of what NTIS intends to provide and further discussed the ideas around a community platform for analytics that would enable smaller organizations to leverage combined funding. Mr. Bender mentioned that although NTIS does have federal staff for data science activities, it is the partners that bring the actual services to almost all projects.

Dr. Chraibi stated that for successful AI solutions the government needs to have continuous interactions for these projects to be successful. Mr. Burciaga agreed.

Review Feedback and Action Items

Mr. Capella reviewed the open action items from last meeting. The first, “NTIS took action to try to understand if there were opportunities for partnership with NOAA on digitization,” Mr. Strickland had addressed and although NTIS had reached out to NOAA there was not an opportunity here.

The second, “Mr. Capella stated that he would be coordinating the minutes of the meeting internally, and then with Dr. Gaddam. He would then post the minutes on the FACA site provided by GSA,” had been accomplished shortly after the last board meeting.

Member Wrap up Discussion and Public Comment

Mr. Capella asked if anyone from the public had any comments. Hearing none, he turned the meeting over to Dr. Gaddam for the closing. Dr. Gaddam congratulated NTIS for its improved financial picture and viability of its mission. He stated his appreciation for the opportunity to engage with NTIS and his thanks to his fellow board members.

Mr. Capella stated that he would be coordinating the minutes of the meeting internally, and then with Dr. Gaddam. He would then post the minutes on the FACA site provided by GSA.

Board Governance/Administration and Adjournment:

Mr. Capella mentioned that he would like to try to schedule the next board meeting maybe in October or November timeframe. He stated that he would work through Dr. Gaddam to define a time that worked.

Mr. Capella closed the meeting.