

US Animal Telemetry Network Steering Group Meeting SG-10

July 14th, 2021
Meeting Minutes

I. Welcome (B. Woodward, S. Simmons)

B. Woodward opened the meeting and welcomed SG members to SG-10. He also introduced Gabrielle Canonico who manages the MBON program in the IOOS Program Office. S. Simmons asked if any SG members wanted to add any items to the updates section of the agenda. K. Holland noted he will add an update on the bio-logging meeting to his update.

II. IOOS Marine Life Program (B. Woodward, G. Canonico)

The discussion centered on the joint outlook for ATN and MBON under an IOOS Marine Life Program. B. Woodward explained the context of wanting to unify ATN and MBON, which are both components of the IOOS Program Office. G. Canonico and B. Woodward have been discussing how to bring the programs together, which has already begun with BioTrack. These discussions are focusing on a major step that has been taken. The budget process for FY 22 has begun, and the President's Budget requested an additional \$1.4B for NOAA above the FY 21 enacted level. This is largely due to the administration's focus on climate. This funding would trickle down to IOOS, among other offices. The total request for FY22 for IOOS is \$69M. Included in this request is funding for the "Marine Life Program" at \$17M. This program is intended to be built on top of MBON and ATN, meaning they will be two major and essential components if the program is successful. This prospective funding changes prospects for the ATN in a significant way. S. Murphy noted that the House mark for IOOS in FY 22 is currently \$50M.

Discussion:

- W. Turner asked if the changes affect B. Woodward's plans for retirement. B. Woodward responded that he has decided to extend his departure date to June 30th of 2022 (a six-month extension). While it is not official, IOOS has been supportive.
- G. Canonico indicated that given the potential increased funding, it would be beneficial to consider how it may be used to unify ATN, MBON, and any other regional association activities. She expressed support for B. Woodward's leadership during this time. B. Woodward added that there will be a succession plan put in place regardless, and it will be conditioned upon what the FY 22 budget turns out to be.
- M. Ogburn noted interest in seeing how the national-scale programs interface with regional activities. It will be important to find balance between regional and national needs, given that some regions have been less involved in biological observations than others.
- G. Canonico responded that they are working to home in on national priorities and link them with regional needs that in some cases are still emerging. There will be an education piece and an outreach piece that are essential at the regional level. It will also be important to coordinate with national groups (such as ATN) to determine overarching priorities. Part of the on-going processes is working through those priorities. B. Woodward noted agreement, that this is one of the current challenges being worked through.
- M. McKinzie noted that some funding will ideally go towards further development of a data assembly center to accommodate a marine life program. B. Woodward agreed that this is an important part of the process. M. McKinzie also noted that hopefully some of the funds will go towards development of regional infrastructure nodes on the West Coast for acoustic telemetry data management.
- W. Turner noted excitement related to the potential FY 22 funding and commended the work of this group and others on their contributions to bringing biological observations into the forefront on federal observations. B. Woodward agreed that a sustained program is the ultimate goal. SG Members expressed support for B. Woodward's extension.

III. Updates

a. ATN (B. Woodward)

- Funding Profile

B. Woodward noted that there were many funding uncertainties as of SG-9 (the last meeting). A key update, however, is that the IOOS Program Office will be funding ATN for FY 21 up to \$735K. The motivation for this was the optimism of the FY 22 budget, and ATN is very grateful. This brings the total ATN amount of funding to \$1.435M, which is higher than the FY 20 level of \$1.38M. The FY 21 funding also includes \$550K from ONR and \$150K from NMFS. BOEM was not able to contribute for this year.
- B. Woodward congratulated M. McKinzie for her work on the DAC and thanked M. Weise for ONR's support of the DAC.
- The New York State Energy Research and Development Authority (NYSERDA) has recommended the ATN DAC as a go to repository for wildlife data collected by Offshore Wind (OSW) energy developers. The NYSDERA report (<https://www.nyetwg.com/nyserda-resources>) included the ATN DAC in a list of 15 databases that are recommended as primary or secondary repositories for different types of raw wildlife data generated by OSW developers and their contractors. B. Woodward noted that if the DAC were to get very busy as a result, we might need to seek additional resources. Nevertheless, it is still a very positive step and great recognition for our DAC.
- Real-time GTS Data Project – AniBOS

B. Woodward noted that this is taking time to get going but it is moving forward. ATN is leading the development and implementation of the AniBOS real-time data management strategy and approach. For the ATN R/T ocean profile data pipeline to the WMO GTS, all components have been developed and in place and they received an operational green light from the WMO June 15, 2021. A live end-to-end pipeline demo, including QC, encoding BUFR messages and pushing them to NDBC and insertion onto the WMO GTS is imminent. This capability will be a huge operational step forward, and then we will need to ensure that the data are actually able to be used in regional and global models. Metrics will be used to track progress. AniBOS does have an active data subcommittee, which M. McKinzie sits on. B. Woodward also noted that Clive McMahon et al. has put together a community paper that is in final review: "Animal Borne Ocean Sensors – AniBOS – a complementary and essential component of the Global Ocean Observing System (GOOS)."
- Argos Fees Program

The Fees Program is continually growing. It is currently supporting 52 programs and 2,082 tags. This program is going very well, and B. Woodward thanked M. Weise for his support.
- Workshop Reports

B. Woodward shared screenshots of the workshop summary cover page and the national summary one-pager. Logos have been added for all relevant programs. Regional summaries can be stand-alone and are also found in the full summary report. This work will inform the Marine Life Program development process.
- U.S. Telemetry Asset Inventory Process

B. Woodward invited SG members to send him insight on whether the community is ready get back into the process of updating the locations of moorings and projects. It was put on hold because of COVID.
- Unifying ATN & MBON

Most of this information was covered under the IOOS Marine Life Program Update. B. Woodward noted the importance of maintaining brands of the individual programs. The four components of the program will be:

 - i. Regionally and nationally-based sustained biodiversity and tagging operations
 - ii. The DAC/cyberinfrastructure
 - iii. Regional acoustic node data wranglers
 - iv. Interagency competitive process for innovation
- Succession Plan for ATN Network Coordinator

B. Woodward commented that the only major change is that any specific succession plan depends on FY 22 funding levels, which is uncertain. This is part of the reason B. Woodward has delayed his retirement from the position.

- ATN DAC Data Management Services
This is the process of having other agencies pay for data management for their PIs. This is a solution that is in play for ensuring continuous DAC support. This process is not quite as urgent as it was at SG-9, but elements are still in place to make sure this is successful within the FY 22 approach.

Discussion

- K. Holland noted that maintaining brand recognition is an important point. The important work the ATN has done should be additive to MBON and the marine life program, rather than being consumed. Going forward, component parts should retain their identify while contributing to the bigger picture. G. Canonico and B. Woodward noted agreement.
- K. Holland added that AniBOS has an ethics committee that he serves on. They are working on an ethics/best practices document that will eventually be shared. S. Simmons stated that AniBOS will also be rolling out their website along with social media capabilities.

b. Operational DAC (M. McKinzie)

The ATN DAC has just wrapped up Year 3 with Axiom. This has allowed M. McKinzie to track metrics of progress. These metrics demonstrate DAC growth from year to year. For example, the number of projects and deployments added in years two and three was significantly higher than in the first year.

- As of July 2021 (start of year four of the project), the following DAC progress has been made:
 - 149 Projects in DAC
 - 102 Discoverable in Portal
 - 59 Species in Portal
 - 3498 Deployments in Portal
 - 22 Datasets DOI minted and archived at DataONE (2 pending)
- The Argos Fees program now includes:
 - 52 Programs
 - 2000+ tags
 - Just under half of these tags have been deployed; data is being collected from about 700
 - 50 species
- The BioTrack Program continues to grow:
Biotrack is a collaborative, multi-species synthesis project that seeks to assess and monitor hotspots of marine megafauna biodiversity by linking satellite telemetry data with remotely sensed environmental data on multiple EOVs and geographic "seascapes". The project is led by Dr. Neil Hammerschlag & PhD student Chelsea Black, Uni. Miami-RSMAS, and covers the Western North Atlantic, Gulf of Mexico and Caribbean Sea. So far, the project has 27 confirmed collaborators from 18 organizations. Data is being collected from 25 projects, 620 deployments and 23 species.
- A virtual data workshop was held for the Southeast/Gulf of Mexico region in May of 2021. There were 36 attendees from the Southeast Fisheries Science Center, USGS, Navy and other academic institutions. The workshop was two hours, and included an overview of the ATN, the DAC, and its cyberinfrastructure components, as well as included a demonstration of the ATN registration app, research workspace and the data portal. After the event, M. McKinzie hosted opportunities for PIs to meet one-on-one and ask questions. The next workshop will likely be held for the Northwest this fall.
- Portal updates

- The color scheme for large projects (>50 deployments) has been updated to improve visualization.
- Foie Gras will be rolled out soon. This is a tool that will help smooth out real-time data tracks in the portal. This will become the automatic display for all auto-ingested data.
- An animation feature is under development. This will enable the addition of environmental layers on which you can overlay data and animate. The animations can be exported.
- Standardized and QC'd NC File
 - This is being worked on so that data can be archived at NCEI. A license statement has been developed so that different funding entities can participate. A few SG members have provided feedback on the current statement.
 - License Statement: "These data may be used and redistributed for free, but are not intended for legal use, since they may contain inaccuracies. No person or group associated with these data makes any warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose, or assumes any legal liability for the accuracy, completeness or usefulness of this information. This disclaimer applies to both individual use of these data and aggregate use with other data. It is strongly recommended that users read and fully comprehend associated metadata prior to use. Please acknowledge the U.S. Animal Telemetry Network (ATN) or the specified citation as the source from which these data were obtained in any publications and/or representations of these data. Communication and collaboration with dataset authors are strongly encouraged."
 - M. McKinzie has been working to resolve some issues related to the NCEI .NC template's global attributes.. It would be ideal to be able to use group attributes in addition to global attributes, however that is not currently possible under present IOOS standards. She noted she is working to resolve these issues for ATN, and the AniBOS Data Committee is meeting frequently to talk about the same issues. Some specific issues include appropriate assignment and classification of unique ids as well as which library or vocabulary should be referenced and therefore the most appropriate metadata to include within each attribute. This is not necessarily obvious because a variety of libraries are available and they often, do not include appropriate terms for animal borne sensors or platforms. Current categories under discussion are as follows:
 - Platform = Animals/Vertebrates (Vocab = [NASA GCMD V10.1](#))
 - Instrument = Satellite Telemetry Tag (Vocab = ???)
 - Unique IDs
 - Platform ID, Tag ID, Deployment ID, Animal ID
 - Morphological Attributes
 - Sex: [NVS S10 \(nerc.ac.uk\)](#)
 - Life Stage: [NVS S11 \(nerc.ac.uk\)](#)
 - Length: [NVS S06 \(nerc.ac.uk\)](#)
 - Weight: [NVS S06 \(nerc.ac.uk\)](#)
 - Units: UNIDATA's Uunits package (SI Units)
 - [NVS P06 \(nerc.ac.uk\)](#)

- Any members interested in exploring code, documentation and issue tracking for ATN NCEI archiving can look here: github.com/ioos/ioos-atn-data

Discussion:

- M. Ogburn asked if the animation of moving tracks is what she has been working on with J. Young on acoustic telemetry. M. McKinzie replied that no, that is a separate project. J. Young has been working with the Axiom and the FACT Network to develop another set of visualizations specific to acoustic data (DaViT)). The animation shared by M. McKinzie will be up on the main portal.
- S. Simmons asked if Meg is in touch with other folks who deal with biological vocabularies on a regular basis. M. McKinzie stated that she is involved in the AniBOS data committee, the ESIP biological data cluster and the TDWG machine observations working group and has also discussed the ATN template with Abby Benson from OBIS, to help align it with the Darwin Core standards. All are working to make the data interoperable and integrated.

c. SG Updates: Real-time tracking with Motes in HI and acoustics in MA (Kim Holland and Greg Skomal)

- K. Holland stated that the planning for Biologging Symposium BLS-7, Oct. 18-22, 2021, is accelerating. 300 abstracts have been submitted for consideration and are currently under review by a panel. Next, accepted submissions will be sorted into categories. There are plans for live presentations, recorded presentations, and Q&A sessions. They will work to make the virtual experience interesting and sophisticated.
- K. Holland discussed Mote deployment on Hawaii, funded through ONR. There have been more problems than anticipated in getting access to appropriate sites. Some of the sites require hiking through private property, and permission to set-up Mote receiver equipment. These problems are being worked around; three sites have been identified and Mote deployment is certain at two of them. K. Holland shared two slides demonstrating the location of Mote sites. He noted that at the Hawaii latitudes the satellite revisit times are much longer than at higher latitudes and hence the direct line-of-sight Mote receivers are an excellent remedy. They are working to augment this coverage with additional Motes on the big island as well. K. Holland is working with private property owners to gain access to restricted sites. There hasn't been as much activity due to COVID, so the delays likely haven't impaired operations as much as they normally might.
- B. Woodward asked if K. Holland has been in contact with Jim Potemra at PacIOOS on the data side of the Motes, once installed. A key part was to have the data aggregated. K. Holland responded that they are working closely with Jim, who is taking some of the tagged shark data profiles and trying to integrate them into the local ROMS model. They are moving to start feeding data to the local oceanography community while they also work through the DAC and GTS system.
- G. Skomal stated that funding from ONR allowed his team to buy five real-time receivers. These were deployed in summer/fall of 2020. The receivers collected 28,000 detections from over 100 transmitters. G. Skomal shared his screen to show a dashboard of receivers tracking movement on the outer Cape. Receivers were deployed again in June of 2021. Each marker represents a receiver, and any time an animal swims within the range (300-500 meters), notifications are sent out to public safety officials, scientists, and lifeguards in the associated town. The dashboard shows the health of receivers and how the system is performing. It even shows what animals have come by and when. Towns close to the receivers have received this live portal very well, and other towns are thinking about stepping forward to purchase similar systems.
- B. Woodward notes that he is on the receiving end of the pings, and he gets many of them. It's interesting to see and is a wonderful effort. B. Woodward thanked G. Skomal and stated he hopes the effort can be expanded in coming years.

IV. Review of Actions (Detailed account below; see table for summary of current actions)

a. Complete and distribute spreadsheet to organize in-progress telemetry projects

- M. McKinzie created a funder log spreadsheet that she has now sent out to major funders to fill out with the telemetry projects they currently support. The links will be sent out again, so funders should be sure to look through the spreadsheet and provide input. Any questions should be directed to M. McKinzie.
 - Action is considered complete and will be removed from the table. M. McKinzie will incorporate any status updates into her DAC updates.
- b. Set up a lessons-learned discussion with Fred from OTN regarding the OTN Equipment Loaner Program**
- B. Woodward provided an update on the ATN loaner program using a slide. R. Wells and B. Woodward had met with Fred Whoriskey, who is the Executive Director of the OTN program to discuss Fred's experiences with their loaner program. It was eye-opening to learn the scope of the OTN loaner process. OTN assumes all the risk of lost equipment (meaning there is no burden on the group/individual that received the loaned equipment). OTN has been able to loan out over 3,000 receivers, acoustic releases, and other equipment. B. Woodward was surprised to learn the extent of their program, nationally and internationally. OTN has a formal request process that can be initiated online, and a committee reviews the requests. It is a large effort with people dedicated to this specific work. Fred expressed a few of the challenges they have faced, including working with attorneys, working with distant countries like Mozambique, and incurring significant losses of equipment. Metadata also presents difficulties. As a result, R. Wells and B. Woodward have decided that ATN will not loan instruments internationally, and that the scale will be kept small for now (given funding constraints).
 - K. Holland commented on the evolution of OTN. He himself has received some OTN equipment. He noted that it can be easy for PIs to mix up what they got on loan and what is their own equipment. So, it would be helpful to have it spelled out in contracts that PIs should keep loaned equipment separate from other equipment. M. McKinzie noted that all ATN equipment will be labelled with numbered ATN assets labels.
 - M. McKinzie added that it will be important to track what assets are on the shelf as opposed to in the water, which she needs to track for MBARI requirements.
 - M. Weise asked B. Woodward if any of the legal issues discussed by Fred were relevant to ATN's situation. B. Woodward expressed that his interpretation of the legal issues was that they arose when people agreed to do something that they didn't follow through with. There were also challenges with equipment that was loaned to Europeans, who faced barriers placing the equipment where desired due to military conflicts. Generally, legal issues should be considered in this whole loaning process.
 - Action is considered complete and will be removed from the table.
- c. Set up a new sub-group to explore options for a Network Coordinator succession plan**
- B. Woodward notes the action is not something ATN members need to spend time on. This may be more appropriate at the IOOS level. The best input for SG members is to brainstorm potential candidates.
 - S. Simmons expressed support for this idea.
 - M. Weise suggested any sub-group might consider what the key attributes are for the ideal candidate. B. Woodward agreed, and stated that if the new structure is an FTE position, it will be based on FY 22 funding. If there is not an FTE position available, it could be a contract position responsible only for non-federal ATN activities. These may be two different sets of candidates. B. Houtman also noted to be cognizant of federal hiring rules.
 - Action is considered complete and will be removed from the table. A new action item will be written, instructing SG members to think about viable successor candidates. B. Woodward will keep the SG members updated as plans develop regarding the structure and key attributes of the successor position. This will also be listed as an action item.
- d. Initiate conversations with Gulf Coast PIs to facilitate more engagement.**
- J. Price has not been able to get much of a response from Gulf Coast PIs. As a result, he hasn't been able to engage the PIs or regional directors.

- B. Woodward suggested to complete the action item and reframe a new task.
 - J. Price noted that there is a new director at BOEM that comes from an environmental background, so this may be an opportunity to set priorities for the Gulf. J. Price will reach out to the new director to inform her of the ATN and its capabilities. The new action will be added to the table, and the previous action will be removed.
 - M. McKinzie commented on another matter related to the Gulf Coast. She has had fruitful discussions with the CETACEAN (Compilation of Environmental Threats and Animal data for Cetacean population health Analyses) program, supported by Deepwater Horizon funds. It is a well-funded, multi-year project, and Axiom is designing the cyberinfrastructure for their new portal. She has had conversations with them about integrating data from their PIs into the ATN system.
 - S. Simmons she is on the executive committee for CETACEAN, and they are targeting data sets that include sperm whale telemetry data from the SWSS (Sperm Whale Seismic Study) project and similar sets. There may be some data on the telemetry side that BOEM has funded in the past that could end up in ATN through the CETACEAN project.
 - M. McKinzie added that ATN would facilitate data management for CETACEAN telemetry projects, but they will work together to share map layers amongst portals.
- e. Review new package (ADEPTHER) for data visualization, funded by NPS (K. Hart, M. McKinzie)**
- M. McKinzie noted no progress has been made. It is on-going, and low priority.
 - B. Woodward suggests adding an action to keep track of Tagged Animal Movement Explorer (TAME), a USGS tool for satellite tracking.
 - M. McKinzie suggested adding J. Young to this action item as ADEPTHER is primarily an acoustic telemetry tool. K. Hart also noted that ADEPTHER is more geared towards freshwater systems than marine, but the action will remain.
 - Action will be kept in the table, and the TAME reference will be added.
- f. Determine future funding opportunities through identification of agency needs to achieve funding goals. Develop 1-2 pager defining importance and options for funding, including 1) baseline operations, and 2) ATN project/topic support (M. Weise, R. Wells, K. Hart, B. Houtman)**
- M. Weise commented that the implementation plan has moved forward, and there is still discussion to be had regarding how to bring in NOPP. There is an idea to do an interagency call to meet the tagging needs for various agencies, but more discussion is needed. Another aspect is willingness of agencies to support the data assembly center user fees.
 - S. Simmons suggested marking this action as complete, and this concept will be tracked through the implementation plan updates. B. Woodward agreed.
 - M. Weise suggested that this could be captured in the implementation plan but may also be incorporated into longer-term strategies or documents. W. Turner noted agreement.
 - B. Houtman commented that they are constantly hearing about climate research, especially in regard to justifying funding opportunities. It is one of those hooks—any way we can demonstrate linkages to climate research is very valuable. S. Simmons agreed. Historical data could be a place to connect and justify a connection to climate needs.
 - B. Houtman noted that NSF is also frequently asked how their research could support USGCRP. ATN should also make this connection where possible.
 - Action considered complete and removed from table. However, the concept of funding opportunities should be worked into new implementation plan and user fees task teams as appropriate.

- g. **Determine which sections of the Data Policy Document should be pulled out to support the needs of the acoustic data community. Then, discuss with general counsel how to ensure data policy is in line with federal law (J. Young, B. Woodward)**
 - B. Woodward stated that this is another on-going item that is essential. The Data Policy Document has been renamed to Data Management Guidelines. Matt Biddle, currently in the IOOS Program Office, will meet with B. Woodward to map out a completion plan.
 - Action item is on-going.
- h. **Review B. Woodward's email on archiving and citing and discuss their thoughts on a decision via email (NCEI and licensing issue) (B. Woodward, M. McKinzie)**
 - B. Woodward suggested the action item be marked as complete. M. McKinzie had addressed this issue in her slides, noting that NCEI is accepting the license statement in lieu of a licensing agreement.
 - M. McKinzie notes she did share a copy of the draft license statement with the committee and noted that this issue will have to be revisited when we archive with OBIS because they require a specific license.
 - Action item is considered complete and removed from table.
- i. **Arrange for a demo to highlight the environmental layers recently added to the DAC and maximize the information dissemination and get input on usefulness/utility (M. McKinzie)**
 - M. McKinzie noted that this action is on-going. She will send out a doodle poll and send something around for August.
 - M. McKinzie noted that she is interested in getting more information on metrics, environmental layers, and other material they might incorporate.
- j. **Share template language on user fees (J. Young)**
 - Since J. Young is out, B. Woodward suggested keeping this action item and having her report out at SG-11.
- k. **Send draft IP mission and vision language to the SG for review (J. Young)**
 - S. Simmons suggested that given potential funding changes, they table this action for now.
 - Action is considered complete and removed from table.
- l. **Renew and revise TOR for SG approval (B. Woodward, S. Simmons)**
 - B. Woodward invited SG members to comment on the revised TOR.
 - W. Turner suggested they revisit the two-year term stipulation.
 - M. Weise agreed that the meetings do not need to be public, given that ATN is not a FAC. B. Woodward commented that they have been careful not to trigger FACA rules. There is even less of a need now that the network is established and familiar. The minutes do go to the ATN IOOS website, which is public. No inquiries are received. B. Woodward also puts ATN highlights in the IOOS Eyes on the Ocean Newsletter and is told the distribution is around 1,600 people.
 - M. Weise noted that he has received questions from people reading this newsletter, so this is very good outreach.
 - S. Simmons asked SG members to share thoughts on frequency of meetings. SG members agreed quarterly meetings are good for now, but the language should be left open in the TOR to give flexibility.
 - Action: B. Woodward and S. Simmons will accept changes and share the document with the SG a final time.
- m. **Other**
 - B. Woodward proposed having J. Young present on the visualization tool she has been working on with Axiom. He believes the tool is a good start for addressing a public audience. This action will be added to the table and J. Young will be responsible.

V. Team Activity Updates

- a. **User fees approach for acquiring funds from Other IOOC Agencies**
Concept; Mechanisms (Bill, Bob, Woody, Mike, Jim)*

- B. Woodward stated that no action has been taken, primarily because there is less urgency. This is still a valid activity that will need some attention.
- M. Weise noted that he and B. Woodward did have a conversation with Sheyna Wisdom (the new AOOS director) and Axiom to discuss mechanisms for funding for the DAC.
- B. Woodward noted that Axiom wasn't sure how to respond to the suggestion that they be given money from different sources, because of the administrative burden. However, this doesn't mean that approach shouldn't be taken. Axiom also needs to be influenced by the evolution of Marine Life Program. This remains an important item, and discussions are on-going. M. Weise noted agreement and suggested that the idea of how to keep agencies at the table should be kept on the table.
- W. Turner asked if any of the agencies have data management language that directs people to the DAC in their directions. M. Wiese responds that they do have some boiler-plate language that has been shared with BOEM, and they are happy to share with NASA and other agencies too. W. Turner commented that would be a primary way to implement DAC use at NASA.
- B. Houtman added that NSF OCE has standard language requiring that any award data must be put in an open-access database. It would be helpful for NSF to receive that language and compare.
- J. Price noted that if the language in any announcement is not up front and clear, it gets lost. The specific tasks for data management should be required in the proposed budget.
 - ACTION: M. Weise will circulate boiler-plate language to the steering group. Action added to the table.
- S. Simmons noted that this avenue, if done correctly, could help open up ATN to non-federal sources of funding, even as related to the UN Decade. Several decade programs involve telemetry data, so there could be opportunities to engage with projects from foundations. This could become a source of support for ATN. Wind energy is one area in which ATN could be helpful for impact assessments, and a user fees approach may help bring in funding. B. Woodward noted agreement and added that wind developers may be willing or required to pay for data management that supports impact assessments. It is uncertain how this whole process will evolve but scaling up data management capabilities will definitely require more resources. This item should continue to be discussed.

b. ATN Implementation Plan Revisions (S. Simmons)

No progress on IP development since last SG (Joy, Sam*, Bill, Mike, Kim, Megan, Sean/John, Stephanie)*

- S. Simmons asked how the MBON merge, and the Marine Life program will affect the ATN implementation plan. S. Simmons suggested the task team sit down with Gabrielle and B. Woodward to figure out potential implications. B. Woodward noted this is an important conversation but will likely not be ready for a couple months. Task team members noted agreement on this strategy.

c. Tags for Researchers (R. Wells)

Update on status of program/use of equipment, and "lessons learned" from discussions with Fred Whoriskey (Bill and Randy)

- R. Wells provided an update on what the inventory of instruments includes:
 - 1 goniometer
 - 2 ICOM R-30 hand-held receivers for satellite tags
 - 10 VR-2TX transponding acoustic receivers
 - 2 VR-100/300 acoustic receivers with transponding omnidirectional hydrophones
 - Magnetic activator probe
- These instruments are ready to send once a mechanism for lending is in place.
- M. McKinzie noted there is about \$2.5K left over in the budget. They are working on using up this money in the next couple of weeks. M. McKinzie is pricing out other instruments, labels, or maintenance supplies that might be purchased with the remaining funds.
- ACTION: B. Woodward suggested that Randy, Meg, and he should have a meeting and put together a notice and agreement for the loaner program.
- B. Woodward added that the goniometer was used by G. Skomal, who had tagged a shark whose tag washed up on a beach in Mississippi. The Woods Hole Group was able to put the

goniometer in the mail to Greg's colleagues and they found the tag before its battery died. M. Weise noted that this type of success story is exciting and could help increase awareness of ATN activities and availability of tools. M. McKinzie suggested social media and the Eyes on the Ocean newsletter may be a good spot to share this story.

VI. Wrap up Items

- a. The next meeting will take place in late October. COL staff will send out a poll for the week of October 5th and the following week.
- b. S. Simmons asked for comments on the meeting format.
 - o SG members agreed to continue with the current meeting format.
 - o R. Wells suggested that completed action items could be shared over email ahead of time. He noted that if we can get agenda out early enough, people can note completed action items that staff can update before meeting. S. Simmons and B. Woodward agreed to take this step.
 - o M. McKinzie and B. Woodward noted SG members should also feel free to send them feedback on their updates.
- c. B. Woodward thanked SG members and closed the meeting.

Action Items

#	Action Item	Responsible Party	Due Date	Comments/Updates
1	Consider potential candidates for the position of ATN Coordinator	All SG Members		
2	Keep ATN SG members updated as plans for ATN Coordinator succession develop.	B. Woodward	On-going	Updates to include key attributes of the successor, in addition to developments regarding the position structure (FTE vs. contractor).
3	Reach out to new BOEM director to inform her of the ATN and its capabilities	J. Price	SG-11	
4	Review new package (ADEPTHER) for data visualization, funded by NPS, and the USGS TAME tool.	K Hart, M. McKinzie, J. Young	On-going	On-going, low-priority.
5	Determine which sections of Data Management Guidelines support the needs of the acoustic data community. Then, discuss with general counsel how to ensure data policy is in line with federal law.	J. Young, B. Woodward	SG-11	
6	Arrange for a demo to highlight the environmental layers recently added to the DAC and maximize the information dissemination and get input on usefulness/utility	M. McKinzie	August 2021	M. McKinzie to lead and send doodle poll to gauge interest from all SG members.
7	Share template language on user fees	J. Young	SG-11	On-going. J. Young will report out at SG-11.
8	Accept final changes to ATN Terms of Reference and share with the SG.	S. Simmons, B. Woodward		
9	Prepare a presentation on the Axiom visualization tool (DaViT) for SG-11.	J. Young	SG-11	

10	Review candidate agency data management language that directs PIs to use the DAC in their funding announcements.	M. Weise (lead); SG Members (review language)		
11	Meet to put together a notice and agreement for the Tags for Researchers loan program.	R. Wells, B. Woodward, M. McKinzie		

Meeting Attendees

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