

U.S. Animal Telemetry Network

Steering Group Meeting SG-13

October 13, 2022

1:00 – 5:00pm Eastern Daylight Time

AGENDA

<https://meet.goto.com/558720405>

Optional Phone Line:

United States: +1 (408) 650-3123

Access Code: 558-720-405

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Chair: Sean Hayes

Participants: Tobey Curtis, Erin LaBrecque, Greg Skomal, Bob Houtman, Jake Levenson, Joy Young, Mike Weise, Matt Ogburn, Sean Hayes, Megan McKinzie, Gabrielle Canonico, Joy Young, Kim Holland, Kristen Hart

1:00 Welcome [5 minutes, S. Hayes]

S. Hayes welcomed everyone to the meeting and post B. Woodward era. Erin LaBrecque is replacing Merra Howe as the Marine Mammal Commission representative. Tobey Curtis has stepped up for a year from NMFS GARFO to be coordinator for ATN. Working to get the Fisheries side of ATN more engaged.

T. Curtis working for one year on loan and will set key priorities and what can be accomplished during this detail to set up ATN for success. T. Curtis background is on shark telemetry and has been working at NMFS for 17 years. He is grateful for support and conversations with SG members.

1:05 IOOS Marine Life Program [15 minutes, G. Canonico]

- IOOS led coordination of federal interagency funding effort and expanded call to ATN related projects and awarded good [projects](#) that will be starting up.
- MBON continuing activities in central and northern California and continuing arctic MBON in Chukchi Sea as well as in the southeast with Frank Muller-Karger.
- A new PIS teams with Nathan Furey from UNH and Cassie Glaspie from Louisiana State University.
- Utility of data for users was the main priority of this funding call and there are a number of groups working to strengthen animal tracking, sound, and strengthening connections in our communities to unify these efforts.
- Bring technology and people together to address issues and topics where marine life information is necessary and needed.
- There is potential for different projects with more agency support and funding. Currently, NOAA, ONR, BOEM and NASA are funding these proposal efforts. NOAA's funding comes from a number of programs (exploration, fisheries, deep sea coral...etc).

- Marine Life did get the infrastructure funding approved to support Axiom for IOOS marine life data network.
- A priority is to maintain the critical aspects of ATN DAC and how we can bring the MBON portal and ATN DAC together along with the platforms developed by the IOOS Regional Associations with a more comprehensive platform that is easy for users.
- M. Weise – Last SG meeting Derrick listed ATN DAC for funding but is there any sense of funding going forward? Is there any more information that can be shared looking forward?
 - G. Canonico is not sure what information can be offered due to the inflation reduction act and the funding that is coming into agencies. How much money and where it is going is unknown and limited to leadership at the moment.
 - T. Curtis – Some hopeful opportunities are on the horizons for ATN. Marine Life is a gap that is needed for climate response and the blue economy. This is the argument we are trying to make within leadership to build support. We are hopeful but the future is unclear.
 - M. Weise – loves the vision of the Marine Life Data Assembly Center and how to get significant funding to get the ATN DAC where it needs to be. MBON and other biological data are complex and to get that off the ground will require dedicated and significant funding.
 - G. Canonico – We do not have the magnitude of funding required for this data assembly center. Currently funding is \$360,000 a year and need to be thoughtful in how those funds are implemented.
- S. Hayes has had similar conversations in NMFS with new resource opportunities and veiled opportunities coming with the inflation reduction act, which should have offshore wind resources coming as well as data management. ATN will fit nicely there but unsure what funding will be allocated. Dr. Spinrad has highlighted tracking of animals with satellites, which is a good boost and talking point for Marine Life. Additionally, satellite tagging of right whales may occur within the year, and if that moves – it is a new budget line that would go to ATN.
 - M. Weise asked what type of tag will be used?
 - S. Hayes – NMFS permit is currently in the queue with support from MMC due to the verge of shutting down the lobster fishing industry.
 - M. Weise – Great to hear and would like to connect about NARW tagging and how we can leverage ATN. An exciting topic that may have some resistance. Multi-sensor working group mentioned how it is difficult to model where these animals are with PAM. Dr. Michael Moore is conflicted, but tagging may be something we have to do.

1:20 Updates

ATN Update and Near-term Priorities [T. Curtis, 10 minutes]

- T. Curtis is a career shark tagger and has been working with NOAA fisheries for 17 years. He is currently on loan from NMFS Atlantic Highly Migratory Species Management Division from July 2022-June 2023. Current long-term plan for ATN Coordinator is uncertain and funding dependent. T. Curtis thanked SG members and support from M. McKinzie for getting him up to speed with ATN.

- Near Term Goals and Priorities
 - Picking up where B. Woodward left off and keep ATN moving forward
 - Strategic planning with IOOS Marine Life
 - Intra and inter-agency efforts
 - Propose new collaborative initiatives
 - New implementation plan under Marine Life
 - Building awareness and utility of IOOS marine life program especially within NOAA. The connections are there but not fully realized. T. Curtis would like to build those connections and partnerships. An example would be the Bycatch Reduction Engineering Program (BREP) that funds a lot of telemetry work and should be considered to draft requirements for projects to use ATN DAC.
 - Near Term Goals
 - Setting priorities for ATN and Marine Life's DAC
 - Ingesting acoustic tag data
 - Expanding pipeline for CTD tags to GTS
 - Multi-sensor tags
 - Supporting regional acoustic nodes and data management
 - Priority to stand up the California node
 - Maintain support for other nodes and build collaboration with OTN
 - Explaining strategic partnerships with IOOS Regional Associations, NOAA line offices, and others
 - Develop new outreach products and update website
 - Highlight achievements of ATN contributors
 - Acknowledge short term plan and have succession planning, created a new generic email address, documentation for a smooth transition, and open to other suggestions
- No questions from members but a few seconded creating more ATN graphics and use of those graphics.

Operational DAC and Axiom “pause” [M. McKinzie, 30 minutes]

- Pause impacts, DAC priorities, FY23 SOW, NCEI update
- A different update considering the service pause and will address near term priorities.
- DAC has been in a service pause since July 1st and functioning in lights on only mode. Registration app, research workspace and portal are still online so new projects and deployments can be registered, and metadata can be updated or edited.
- The DAC can also still auto-ingest data from CLS or tag manufacturers, but that is it.
- Currently cannot integrate new data into the DAC, cannot run QC, foie gras, generate or release standardized files, visualize in portal, convert data to BUFR or release to GTS, push datasets out to archive, or mint DOIs.
- Despite this, ATN has continued to grow with new projects and data
 - 38 projects – 10 new and 28 existing
 - 395 deployments from 20 PIs

- Data from 42 species including 7 new species
 - These are important data and currently the DAC is unable to provide the services that we would like for researchers
- Key priorities
 - Push datasets to DataONE, mint DOIs
 - Convert animal-borne sensor data to BUFR, push to NDBC for insertion onto the GTS
 - Integrate new data into DAC platforms (Reg App, Portal)
- M. McKinzie asked Axiom if they are willing to flip the switch to push MBA datasets to DataONE. It would be minimal effort for Axiom, but no reply [since resolved].
- There are new data still flowing into the GTS, active deployments hooked-up prior to DAC pause are not impacted. December tags will be affected as the DAC may not be up and running my then.
- There is a significant buildup of a backlog of data and if there is a way to get funds these are the top priorities, and if we could leverage to achieve this that would be great
- Looking towards the future
 - Unsure about the funds, but will hear in FY23
 - Hoping to get the DAC up and running by Jan 2023
 - Joint Marine Life Funds – ATN DAC and MBON Portal
 - Less DAC funds then previous funding years
 - Need to resume full service from ingestion to archiving
 - Clear the data backlog
 - General housekeeping
 - Resume stalled projects and on-going development
 - New development will be limited
- DAC is functioning under less funds than in the past. Currently \$360,000 for Marine Life Data Network (ATN DAC and MBON portal) per year which means less funds for ATN DAC to utilize.
- Looking for insights and support on what are the key priorities for allocating this funding.
- Currently three months into a 6 month pause
- Additional updates that are important priorities
 - Reg app updates, required for NCEI archiving
 - QC protocols – code/manual (not documented and needs to be)
 - BUFR template update, fix WMO ID field glitch (IDs are too large and established a work around and were putting IDs in new field for short term. It is now fixed and will be updated in WMO manual of codes, but will require work on Axiom side and will take some of Kyle’s time to fix that.
 - Foie Gras – 60% of auto-ingested data have successfully run through foie gras. Need to figure out how to deal with 0s in error parameters and/or large temporal or spatial gaps in the data. These processing steps need to be improved. Have determined steps forward but need funding and guidance on if we should continue this effort.

- Portal Improvements- animation feature, improvements to catalog, etc. (are they important yes or no?).
- Open acoustic pipeline – the pipeline is there, and metadata are there but users cannot see it at the moment and analogous to OTN files. Need to work with researchers to get full approval for their data and metadata. Need to determine how much effort we want to put into acoustic telemetry development— finalizing pathway should be minimal effort, integration into portal will require additional effort/funds.
- New Development Goals:
 - Establish ATN node – so we can ingest raw acoustic data files and metadata, run QC protocols and detection matching, service files back to researchers and bring this data into the DAC. Ex: BioTrack presently to compile the data/metadata OTN has to facilitate. Even once the current pipeline is running Meg will still not have access to actual data files that she could pull out and provide to BioTrack PIs. This would require an ATN node.
 - WC sensor data to GTS – pushing more animal borne sensor data, for wildlife computer data we have a vision for how to move forward and would be the only ones to do that globally and we should invest in that.
 - Establish Lotek pipeline – providing DAC services is problematic due to lack of auto-ingest pipeline.
 - Argos-4 impacts – impacts to the DAC and processing of data and parameters are changing and raw data files that come into the system are fundamentally going to change and need to have discussion with tag manufactures to get understanding about how the data files are different and documentation about these impacts, This will impact how we ingest data into the DAC.
 - Multisensory tags
 - NCEI pathway – satellite trajectory NCEI archiving deadline June 30, 2023 for NOS Milestone
 - Version 1 trajectory template finalized, all issues resolved
 - Working on generating example files
 - Final file review
 - Add ATN to NCEI queue
 - Add documentation to IOOS website
 - Work on DWC conversion

Discussion

- M. Weise—Wow, okay. That is a lot to unpack. We don't have the time to address priorities and give input. Add an action item to meet to discuss the key priorities. The disruption is huge along with the data backlog and the amount of time that will take Meg to deal with. Would love to fund an extra person to help and there are no funds, but we need to get a solution to that. Exciting new pathways for the DAC. How do we move forward with

identifying priorities? Meg likes the idea of picking time to reconvene or see how the rest of the meeting scopes out to see if we have time to return to this topic.

- K. Hart is more than happy to have an additional call or survey who are funded and which way they are leaning if it will help determine priorities. Also suggested opening the discussion to those outside of SG membership.
- M. Weise highlighted that Navy does satellite tagging and DTAGS and multi-sensor tags are a priority. What Meg mentioned above should be a priority but adding multi-sensor tags is a goal for the Navy and possibly other agencies to be integrated into the DAC. WHOI has a database, but it is iffy at the moment and would love to get a pipeline set up. Is there something we can take for action to get Axiom's attention on a couple of key data pushes.
 - T. Curtis agrees and it is on the to-do list. We are getting closer to getting funding out the door but need to establish those key priorities and advise once services gets turned back on. T. Curtis asked the group if people are experiencing disruptions
 - K. Hart mentioned it does create more work to makes those images their partners want. Some researchers are using Reg app to show and/or access their data and they are affected as well.
 - M. McKinzie's main short-term concern are the MBA datasets and being unable to meet deadlines for data archival/public release of these datasets.

2:45 Break [15 minutes]

3:00 SG Members' Updates [5 minutes each]

FACT Network Update (Joy)

- The first in person FACT meeting May 17th-19th at the Brevard Zoo
- Completed data push in June/July of 2022
- Revamped the website
- New nodes connection (e.g. PIRAT)
- Collaboration with MBON and BioTrack
- New DaViT tool for acoustic telemetry
- Capitalizing on FACT network collaboration with BioTrack
 - Worked great and easy to transfer
 - People were updating their project in both
- DaViT making acoustic telemetry data useful for the public and scientists comfortable with sensitive data
 - Funding for this is from ATN and SECOORA. You can click on species and projects with range and distribution
 - Getting buy in and data summarized on website. It can ingest and does not rely on PIs to insert the data.
 - People register project, they can opt in or out of data on the DaViT
 - Lots of positive feedback

- There are some false detections on DaViT from acoustic data—lack standardized practices for false detections and left to the individual researcher
 - Ex: Atlantic Sturgeon not in FL and Maine and Puerto Rico all at the same time and false impression on what the animal is doing the whole time.
- Received a small grant which will be used to add species level quality control flags to detection data
 - Students to identify machine reliable sources for velocity and home range
 - Adaption of Remora package
 - Open coding can be used at all node levels
 - Helps to answer some concerns with acoustic data in the ATN DAC
 - Stand-up FACT geoserver which will be beneficial for flow into the ATN DAC and better project representations on the FACT website
- Lastly, project awarded in 2021 with abundance of amber jack part of this is acoustic dart tagging in southeastern US and great opportunity with these networks to have crossover and role of ATN for coordination
- M. McKinzie has some questions/comments:
 - Seconds the BioTrack effort
 - Responses from 43 PIs and 103 co-PIs and 79 independent projects and variety of species
 - Surveyed people's opinions on contributing data to ATN DAC 20% not interested in pushing data, 35% were willing and want to have it archived in the near future.
 - Positive feedback overall

Sarasota Dolphin Research Program (Randy)- - not here

Cape Cod R/T Receiver Buoys (Greg)

- 5 real time acoustic receivers that were deployed last year suffered some injury due to weather. Got them rebuilt and re-deployed them in June 2022. The team just hauled them in this September. They all worked really well.
- 23,000 detections of white sharks
- 98,000 detections total
- All that data was integrated to public safety officials and on the app Sharktivity
- It worked very well in 2022 and excited to get them out next year
- T. Curtis asked what the major repairs were:
 - G. Skomal talked with Chris Lowe who had similar issues. Currently two components are being tested in the Great Lakes but that is different from the outer cape of MA where there is heavy surf and weather events
 - The failure was in the solar panels, and they have been rebuilt and reinforced.
 - There was also some leakage into electronic parts
 - During the most recent deployment there were no major storms and were pulled in September to avoid any major storms.

- Receivers should be in shallow waters for maximum benefit, but overall a good season.
- Would not make it through a hurricane
- Any seal detections? Greg mentioned they have not filtered data for other species yet but will keep everyone updated.

ACT/MATOS Network Update (Matt)

- Increase in tags in database
- 163 members, 108 projects in ACT MATOS database
- 48 species, 2658 active tags, and 5888 registered tags in total, including inactive tags
- 14 million matched detections and 13 million unmatched detections
- 40 million detections total, including range test tags
- Great growth—2020 uploaded 7 million matched and unmatched and 16 million now within 3 years
- Broader updates are happening similar to what Joy mentioned with the BioTrack collaboration.
- Large dataset integration currently in process. integration into database (acoustic datasets from NC and working with Stoney Brooke to implement new tags into system)
- Offshore wind projects are going into database and a lot more opportunity to engage with wind energy companies for collaboration on data and hope to make progress on that.
- Last database update, RPS was not allocated funding - similar to Axiom pause and they are about to push through some updates with last year funds and until there is more funding will keep the lights on and hope nothing breaks.
- Virtual fall meeting occurred and working with steering committee to best help address offshore wind
- Matt's personal research – tagging in Chesapeake Bay and first detections off of Gulf of Maine
 - Question posed of predator detection? –There is not enough funding currently, but that will be the next step.
- T. Curtis flagged that data management strategies for offshore wind is a need that ATN could fill and need to rejuvenate those discussions. Will work with Jake to start earlier this summer on the east and west coast and not having capacity but hoping to restart discussions.
- E. LaBrecque – RWS regional wildlife collaborative just got passive acoustics OSBP for offshore wind and interested in being involved for acoustic telemetry. Happy to facilitate meeting with them. Sea turtle people are interested in acoustic telemetry tracking
- Linking those strategies makes sense

Hawaiian Motes, PIRAT (Kim)

- Had Tom TinHan come out to give departmental seminar to introduce PIRAT
- Officially faculty to University of Hawaii and tighten connections with PIRAT and telemetry groups

- Now apply for grants on his own with faculty status
- Carl Myer has acquired funding to expand capabilities for acoustic telemetry in western pacific (Guam etc.)—this will include training
- Argos alliance - it's great to be able to say the gazelle launch went off well and Argos 4 - will continue to strengthen satellite constellations, signifies continued commitment from NOAA for satellite telemetry
- Group focus is on new generation of satellite tags capable for measuring and archiving ocean profiles. Example: a tiger shark on PacIOOS page and several hundred ocean profiles obtained from that shark

Habitat Use and Movements of T & E Sea Turtles (Kristen)

- Field updates: amazing success with pop off units in Ship shoal. 9/10 tags were recovered and all on ATN DAC. The provided instrumental behavioral information with Kemp Ridley and tracking turtles for hurricanes
- A few turtles by Sanibel which is not preferred areas
- Keys sanctuary - a lot of the data on the DAC is being used for management decisions for Keys sanctuary
- Satellite telemetry is bringing really important information to users and regional efforts coming together thanks to ATN support and have encouraged several researchers to apply
- Joy has detections coming with turtles and the navy funds in the keys satellite and acoustic tags
- Sea turtles are going back to Tortugas—very shifted like some of the turtle nesting islands

2:45 Team Activity Updates [15 minutes each]

ATN DAC Data Management Services (formerly “User Fees”) [Mike]

- Picking up on something B. Woodward led. B. Woodward drafted a 1-4 page document and M. Weise sent draft to agencies about ATN. If SG members could include language and guidelines then there is a willingness within Navy for this.
- Not able to provide block funding is difficult instead of include data management within a project
- Need to add existing services and costs to that drafted document
- B. Houtman doesn't recall why we only limited to agencies on the steering group, but should consider opening up. New program director Jayne Gardner is interested in ATN and would like to get her involved in this discussion. NSF is funding animal tracking awards and there is an opportunity for her to get engaged. Included data will be publicly available and meet FAIR principles in draft language.
- Coordinate with Joy, Jim, Woody, Bob and anyone else interested in moving that 1-4 page document and move it along.
- Need to understand what the costs are and work with Axiom on that. Need to consider how much data is being brought into the DAC, long term life cycle costs, DOI and archiving. Can we estimate those costs? That is critical to an NSF proposal.
- M. Weise and G. Canonico is happy to join T. Curtis and Derrick Snowden to engage in Axiom discussion.

- Mechanisms
 - How do we do that?
 - Grant language and receiving end is that critical piece with Rob and Axiom
 - \$10,000-\$20,000K award. How can we manage that and need a discussion with them.
 - Possibly funding a person that administers that on the Axiom side. How do agencies push the money out the door.
- M. Ogburn wanted to plug the regional nodes. We would need to work out something similar with RPS and other needs with groups depending what path they go down on with the RAs. This raises a good point on regional nodes pushing data into the DAC.
- M. Weise posed a question of awareness of other data services that might be similar to this and how that might be done. S. Hayes can't think of any that are multi-agency which is challenging.
- Actions to take
 - Third bullet
 - Develop Mechanism
 - Start with some of the discussions with guidelines and finish drafting document. T. Curtis to help draft.
- Is it worth having the funds come out of the proposal and each agency can recognize a committed amount of funding. B. Houtman also mentioned that process is harder for NSF and same with ONR. Science proposals coming in have an easier time with the DAC management costs within the proposal.
- M. McKinzie --~75% of data in DAC is federally funded data. We need to make sure we are providing services to everyone including the 25% that are not federally funded.
- **ATN Argos Fees Program** [Tobey and Megan]
 - Summary of fees distribution, disclaimer and capping fees
 - Been a great success
 - Supporting 3,422 IDs, from 67 Argos programs
 - Thanks to M. Weise and ONR for supporting this effort (\$150,000 year through 2024)
 - Starting to get billed over \$20,000 a month and need to draft a contingency plan for when available funds run out.
 - Attempted to limit impact for the vast majority of programs
 - Maintain incentives to use ATN
 - Should there be a disclaimer? --Argos fees will be covered by ATN to the extent that funds are available in the event that Argos fees programs are exhausted....
 - How to allocate use of funds
 - Challenges- equitable - different needs and reliance on Argos fees program
 - Limit the number of Argos platforms per program
 - Correlate that to a cost level that makes sense

- Average cost per platform is \$40 the range is \$19-\$63/month
- 85% of programs have less than 100 platforms
- Hypothetical cap of 150 platforms would not impact 91% of program users
- Top 9% programs use 47% of funds
- Discussion and recommendations
 - M. McKinzie –relating to limiting program, funds, and platforms. There are challenges to capping or managing program from both of those perspectives, issue is complex and need to be prepared for how we deal with registered IDs when the cap is reached. We want an active tag to transmit even if we reach the cap.
 - Average cost per platform might be higher than that as inactive, but registered tags are included in program count and the numbers we get from them is higher if tag is turned on or off etc.
 - M. Weise in the chat: “for AFP the goal was to attract as many programs/Pis to the ATN and use the DAC. The proposed ways forward appear to support this goal, so interested to hear later any SG guidance”
 - Anyone opposed to the disclaimer on the app paperwork?
 - Support from ATN SG members to add disclaimer
 - Action item for T. Curtis
 - K. Holland appreciates clean options, presenting a straightforward path to implement this.
 - T. Curtis –three of the top five users are top users (NOAA, USGS, Navy)
 - S. Hayes –there is a struggle with capping monetarily and might need some integrated effort. Would be a shame to shut down some of the smaller programs
 - M. Weise -working on a 2 year agreement for Woods Hole Group
 - M. McKinzie –just started spending FY21 funds of \$150,000. FY22 should be available at any point which at a burn rate of \$21,000 a month should last until September 2023.
 - T. Curtis –to target 2023 might have reduction in spending and hopefully level things out a bit. Need plenty of notice with a disclaimer.
 - M. McKinzie mentioned that we may need to cap the programs now if that is the case.
 - K. Holland –echoes S. Hayes and M. Weise in the chat and reminded members the point was to encourage new research programs and smaller groups and protect smaller actors. The bigger actors can fold in some more funds. G. Skomal agrees with K. Holland and suggests to cap on the number of platforms and allow expansion of new players.

ATN Equipment Loan Program [Megan]

- Updated loan program documents ([program description](#), [application](#)) and [list of equipment](#).

- Same inventory in Loan Program
 - 10 VR2Tx receivers
 - 2 VR 100-300 receivers with omni-directional hydrophones
 - 2- ICOM R30 handheld receivers
 - Goniometer
- Thoughts on if we want to continue the program, build inventory, or dissolve and distribute inventory in some other way
- T. Curtis mentioned given limited capacity is it worth the hassle with the loans that are not being used. Currently the goniometer is the only equipment being used.
- G. Skomal –goniometer is the most valuable equipment and it is worth the effort. We haven't had any effort and equipment is collecting dust.
- R. Wells is in charge of equipment and the google doc has not been updated on that front.
- M. Ogburn said a number of ACT and FACT have VR100s and some share them. He does not have a sense of how many people have small arrays of acoustic release receivers. He has not collected a survey on who has it and who needs it.
- Action item to poll all DAC members and regional members about keeping or dissolving program.
- S. Hayes and G. Skomal proposed ATN buy the goniometer.
- **ATN Implementation Plan [All]**
 - 5-year Review Report?/New 5-year Implementation Plan?
 - Marine Life program is developing an implementation plan which ATN will draft to fit underneath the marine life program umbrella.
 - S. Hayes sees efficiency in merging with Marine Life and drafting a short term budget with NMFS, BOEM, and other viable contributing agencies to highlight the resources currently and what is needed.
 - B. Houtman seconds this as well as a budget outlook and what it looks like before the implementation plan.
 - Having clear ATN language under the Marine Life implementation plan that synergy has more power than just an ATN stand-alone plan.
 - Focus on a drafting a mega-budget bill that is detailed, good, and well scoped

3:45 Review of Actions [45 minutes, Sean]

#	Action Item	Responsible Party	Due Date	Comments/Updates
1	Consider potential candidates for the position of ATN Coordinator— Actively reach out to colleagues about position	All SG Members	Completed	Place particular emphasis on candidates for the temporary detail opportunity
2	Keep ATN SG members updated as plans for ATN Coordinator succession develop	B. Woodward	Completed	Important updates and developments regarding the position.
3	ATN DAC Data Management Services (formerly "User Fees")	B. Woodward, M. Weise, J.	June 30, 2022	• B. Woodward to draft a 1-4 page document that describes how an

		Young, J. Price, B. Houtman, W. Turner		ATN DAC Data Management Services Program would work and steps needed to implement it. <ul style="list-style-type: none"> • B. Woodward to send document to M. Weise, B. Houtman, W. Turner • B. Woodward to work on cost estimates with Axiom
4	Provide draft language for ATN DAC Management Services to B. Woodward	M. Weise, J. Young, B. Houtman, W. Turner	June 30, 2022	Create agency specific example language for Pls to use to write the description of their ATN DAC centered data management plan in their proposals
5	Arrange for a demo to highlight environmental and other data layers recently added to the ATN Portal	M. McKinzie	SG-13	M. McKinzie to lead, send doodle poll and meet before next SG meeting Still need to complete this but not until the DAC is up and running – on hold and loop in ML folks
6	ATN Equipment Loan Program language	M. McKinzie, R. Wells	Completed	<ul style="list-style-type: none"> • Documents are finalized • Draft Loan agreement form • M. McKinzie to send out poll –new action item
7	Reach out to Nick Farmer at NMFS about loan equipment program	S. Hayes	SG-13 SG-14	Assess Nick's/NMFS Region's interest in partnering with our loan program – Hasn't been completed
8	Engage with DOE and NMFS on Offshore Wind	T. Curtis, S. Hayes, M. Weise, M. Ogburn	SG-13 SG-14	<p>Engage specifically with Heather Spence at DOE re: her possible membership on the ATN SG, plus coop efforts on Wind – Hasn't been completed and need to follow up on this</p> <p>Currently have requests from NMFS NEFSC and S&T for a prospectus/budget needs.</p> <p>Worth an ATN demo to advertise the DAC and financial nexus and consolidate federal funding. M. Ogburn would like to join conversations.</p>

4:30 **Wrap up** [30 minutes, S. Hayes]

- Review/update actions
 - Leverage Axiom to push ATN data into DAC
 - Draft 1-4 pages on existing DAC services and costs (T. Curtis and M. Weise)
 - Look up old ATN meeting notes as to why meetings are limited only to SG members
 - B. Houtman to engage with Jayne Gardner and M. Weise
 - Follow up discussion with SG members on DAC priorities
 - T. Curtis to add disclaimer to Argos Fees Program

- M. McKinzie to generate poll to survey the SG members and DAC users about the need for an ATN equipment loan program
- Budget for ATN and merge implementation plan with Marine Life
- T. Curtis and S. Hayes to meet with Masha and new COL director about funding and in kind support
- January for next SG-14 meeting – consider in person meeting
- Half-way (December) resend notes and action items to SG-members as a reminder