

US Animal Telemetry Network

Steering Group Meeting SG-3

April 19, 2018
Meeting Minutes

I. ATN Updates (B. Woodward, Chair ATN Steering Group)

B. Woodward called for consensus on the meeting agenda and provided a brief update on ATN activities from November 2017-April 2018. The following meetings have taken place over the last several months:

- ATN talk at Argos Manufacturers Mtg – WHOI: *November*
- AOOOS ATN Workshop – Anchorage: *December*
- Briefed BOEM & NASA on Argos System: *December*
- GCOOS ATN Workshop – New Orleans: *January*
- ATN update talk at GLATOS Annual Coordination Meeting – Ann Arbor: *Feb*

Additionally, the following major milestones occurred:

- Began crystallizing ideas on ways to unite ATN and MBON: *December*
- Initiated DAC transition with 2-day technical peer review at Hopkins – Monterey: *Jan*
 - The ATN DAC is transitioning to Axiom Data Services with Research Workspace. Transition will be complete by July 2018.
- Defined SOW and Deliverables for DAC transition implementation: *January*
- Inclusion of ATN in abstracts for 3 conferences:
 - Ocean Obs '19 – Harcourt
 - SPNHC-TDWG Conference – Benson
 - Conservation Letters – Dunn

B. Woodward discussed that the ATN has completed Phase 1 of the Implementation Plan and is now in Phase 2 (Define & Fund Multi-Agency Baseline Observations & Required Assets/ Infrastructure).

The upcoming goals for the ATN include:

- Call for ideas for FY-19 Baseline Obs/Infrastructure funding: *July 2018?*
- DAC becomes a valuable operational resource for the telemetry community: *July 2018*
- Asset Inventory Project implemented: *Summer 2018*
- Workshop Reports completed: *First 5 by Fall 2018*
- R/T GTS insertion of QC'd T, S profiles from animal-borne tags; WC collaboration: *Fall 2018*
- Three Region West Coast Workshop – partnered with OTN and MBON: *November 2018*
- NERACOOS ATN Workshop: *Early 2019*
- Continued joint efforts with MBON to define/implement a sustained biological observing component in IOOS: *Ongoing*

II. Voting Member Input

- M. Weise discussed the importance of the progress made by the ATN nationally. He noted the impacts of the new project by Ian Jonsen developing improved state-spaced models and the value of sharing tools to be financially responsible. Additionally, noted that ONR supports the work of the ATN.

- J. Price discussed the relationship between BOEM and ATN and potential involvement of MBON. He noted that the MBON pilot projects would be utilized as collaboration area for ATN and broadening the use of animal tags for environmental monitoring.
- S. Hayes updated the SG on progress of involving the NMFS Science Board with ATN activities. The board agreed on the significance of the ATN, particularly on ATN's ability to help with reporting requirements and data requests. They were interested by the idea of the data wrangler, but currently unable to find a funding mechanism at the moment. S. Hayes will reach out again and is confident a mechanism should be able to be found.

III. Non-Voting Member Input

- M. Ogburn provided information on a potential meeting for the ATN to collaborate with the American Fisheries Society. The annual meeting is scheduled for August 19-23, 2018 in Atlantic City, NJ
- K. Holland provided information on the upcoming 2020 Biologging conference in Hawaii. Potential conference for ATN involvement.
- S. Hayes discussed the innovations with the ROAM (RAFOS Ocean Acoustic Monitoring) tag technology. WHOI and the Atlantic Salmon Tagging Project is working with a new hybrid geolocation tag which can self-triangulate. The technology is being miniaturized to be able to be integrated into a salmon tag. There is an existing prototype and an upcoming meeting will discuss the maturation and use of the technology.

IV. Review of Actions from SG-2

- **Connect with International Whaling Commission on tag usage guidelines (B. Woodward)**
 - M. Weise updated on this action. A workshop in Sept 2017 with ONR, IWC, and NOAA took place to finalize Cetacean Tagging guidelines and review and prioritize research needs related to cetacean tag attachments. The guidelines are almost complete and will be presented at the next IWC meeting for final approval. A small follow-up workshop will take place June 15-16, 2018 to identify research needs for ONR and other interested federal agencies.
 - **STATUS: COMPLETE—Final report and guidelines will be distributed when available.**
- **Provide J. Price with the land-based receivers publication (K. Holland)**
 - **STATUS: COMPLETE**
- **Formalize prioritization process for ATN program assets (M. Weise, B. Houtman, W. Turner, B. Woodward, J. Price, S. Hayes)**
 - **STATUS: ON-GOING—Will be discussed under items for review**
- **Re-examine Sea World Proposal (B. Woodward, S. Simmons)**
 - S. Simmons updated on this action. B. Woodward and S. Simmons reached out to Sea World for more details on their proposal in January and have not heard back. S. Simmons noted that an approach should be identified for future funding opportunities.
 - **STATUS: COMPLETE**
- **Intersection with PAM – NCEI Archiving (J. Price, B. Woodward)**
 - **STATUS: ON GOING**
- **Agreement on the ATN Inventory Data Fields/ Investigate the best method of obtaining vital data for the inventory (J. Young, M. Ogburn, S. Hayes, S. Simmons)**
 - **STATUS: ON-GOING—Deferred for future.**

V. Items for Review, Feedback, Discussion, and Decision

- **Update on Transition of the ATN DAC to an Operational Environment – Axiom Data Science (B. Woodward, M. Weise)**
 - Update was provided in ATN updates.
 - ACTION: Demonstrate the Axiom Research Workspace (RW) capabilities once DAC is in operational mode. RW is a web-based platform for managing science projects through the entire lifecycle and will be the mechanism through which researchers will register, upload data, work collaboratively with others, generate Digital Object Identifiers (DOI) for data products, etc.
- **Update on FY-18 Funds from NMFS (S. Hayes)**
 - Update provided in Voting Member Inputs.
- **ATN Steering Group (SG) Process for Identifying and Funding Priority Observations (M. Weise)**
 - M. Weise asked for comments on the process (Appendix 1).

DISCUSSION:

S. Simmons asked where the proposed ideas came from, if there were from both federal and non-federal programs and if in future the SG members will personally solicit ideas or will there be an open call for ALL topics. M. Weise noted that an open call for short topic descriptions will be announced for federal and non-federal entities and once selected for more information, a full description will be requested. S. Simmons asked if there would be cap on funding availability for all projects or if it would be dependent on the merit of the project. M. Weise clarified that it would be dependent on the overall funding available each year. ACTION: Add language to the process to reflect funding availability and project size, split up topic description and submission language in the “Reference of Project” section, and add baseline and anomalous events into the topic description.

- **Consensus was reached on the process for identifying and funding priority observations voting SG members – with proposed edits.**

- **Baseline Observations for This Year: Review/Vote on the Proposed ATN Program Assets for FY- 18 funding (Summary Proposals)**
 - This review is only for feedback and comments. Final voting will take place at a later meeting for voting members only. J. Young recused herself from commenting on project 1 and 3.
 - Proposed Projects (Appendix D):
 1. Regional Data Wrangler to Manage the SECOORA-FACT Acoustic Node Data
 2. Regional Data Wrangler to Manage the MARACOOS-ACT-MATOS Acoustic Node Data

DISCUSSION:

S. Simmons asked what the SG co-chairs are looking for and if there is enough funding available to fulfill all the projects. M. Weise clarified that comments should discuss any major issues or improvements and noted that there is enough funding available to cover all the projects. K. Holland asked if the SG would provide the level of funding asked for. M. Weise affirmed and asked if the SG felt these project proposals matched the overall goals of the ATN. W. Turner asked what the long-term approach to these projects and how would they evolve. M. Weise noted that the projects and deliverables would evolve. W. Turner noted that the projects were east coast specific and if the locations should be expanded. M. Weise clarified that these proposals were tied to the

regional workshops and as the workshops move west, so will the project locations. B. Houtman asked if projects 1 and 2 would be full time. B. Woodward responded that they could be and hopes that they would be. B. Houtman asked about the amount of deliverable work that would be associated with 1 and 2. B. Woodward answered that the proposals describe the deliverables. ACTION: Insure that there is sufficient language in the proposals to reflect the deliverable work for 1 and 2. B. Houtman asked if there would be flexibility on how the money would be moved for 1 and 2. B. Woodward clarified that there would be flexibility and the positions would be managed from the IOOS PO. K. Holland asked about the duration of the positions. B. Woodward noted that 1 and 2 are intended to be sustained, continued, and supported efforts. K. Holland asked if the funding level would remain the same each year and be taken out of each year's funding pool. B. Woodward answered that it would be. K. Holland asked if this money would be an addition to the IOOS RA baseline funding. B. Woodward clarified that it would be an addition, but the wranglers would be focused on biological observations. B. Houtman offered an improvement to the proposals—Positions like 1 and 2 will be one off and other positions should be resubmitted each year for sustained observations. S, Simmons and W. Turner agreed, but B. Woodward and M. Weise noted that the position's success is dependent on the deliverables and issues with annual resubmitting. The voting members agreed to a hybrid 2-year term limit with annual performance check to secure a second year of funding. S. Simmons noted the need to add language to show eventual data submissions to the ATN DAC and collaborations between 1 and 2. ACTION: Ask submitter of 1 and 2 to add language about the ATN DAC and collaborations to their full proposals.

3. Georgia Coastal Receiver Array

DISCUSSION:

B. Houtman asked if the hardware is already there and if the funding will be utilized to refurbish and set back out. B. Woodward noted that the proposal asks for new equipment. S. Simmons noted the need for information on how the 10 tags utilized, if more tags would be beneficial, and the life of the tags and receivers. ACTION: Ask submitter to add additional language about the tags and life span in full proposal.

4. Argos Satellite Fees for ATN PI's

DISCUSSION:

B. Houtman asked if the proposal could add more west coast participation. B. Woodward noted that this support is not being implemented regionally. M. Weise noted the need for additional data submission language on full and raw data sets including GEOLocation data. ACTION: Ask submitter to add additional language about the data submission in full proposal. S. Simmons noted the need for PI information. ACTION: Ask submitter to add additional language about the PIs in full proposal.

- **Task Team Inputs**

- B. Woodward asked if all task team activities could be put on hold until the DAC is operational again. The SG voting members agreed.

VI. **New Items (B. Woodward)**

- **Recommended date for posting call for Short Topic Descriptions for FY-19 funding**

- TBD: ACTION: Decide date for posting call for Short Topic Descriptions for FY-19 funding.

DISCUSSION:

SG discussed a potential date during mid-August 2018. Due to issues with difference agency funding rules, caps, and emergency funds, the date was not decided on.

- **Upcoming conferences that would be critical to have ATN attend and at which SG members could represent the ATN**
 - ACTION: Generate a google spreadsheet of upcoming meeting to assess SG member attendance.
- **Can we create an ATN logo?**
 - ACTION: S. Simmons will explore options of designing an ATN logo.

VII. Summary and Next Meeting

- SG-4 will be planned for either the week of August 13th or 20th 2018. Date will be finalized over the coming weeks.
- SG discussed a potential in-person meeting November 5-6, 2018 in California.

Meeting Attendees

Steering Group Members

Hart, K.	USGS	kristen.hart@usgs.gov
Hayes, S.	NMFS	sean.hayes@noaa.gov
Holland, K.		kholland@hawaii.edu
Houtman, B.	NSF	bhoutman@nsf.gov
Ogburn, M.	Smithsonian	OgburnM@si.edu
Price, J.	BOEM	james.price@boem.gov
Simmons, S.	MMC	ssimmons@mmc.gov
Turner, W.	NASA	woody.turner@nasa.gov
Weise, M.	ONR	michael.j.weise@navy.mil
Wells, R.	CZS	rwells@mote.org
Woodward, B.	IOOS/ATN	bill.woodward@noaa.gov
Young, J.	FWRI	Joy.Young@myfwc.com

Others

Desai, K.	IOOC	kdesai@oceanleadership.org
-----------	------	--

Action Items

#	Action Item	Point	Due Date
1	Set up a demonstration of the research workspace capabilities once DAC is in operational mode.	B. Woodward	TBD based on DAC progress
2	Update language in the Process for Identifying and Funding Priority Observations according to review discussion.	B. Woodward, M. Weise	July 31
3	Ask all proposal submitters to update their ATN Program Assets according to the review discussion.	B.Woodward	mid-June
4	Decide date for posting call for Short Topic Descriptions for FY-19 funding.	M. Weise, B. Woodward, S. Simmons	July 31
5	Generate a google spreadsheet of upcoming meeting to assess SG member attendance.	B. Woodward	Ongoing
6	Explore options of designing an ATN logo.	S. Simmons	ASAP

On-Going Action Items

#	Action Item	Point	Due Date
7	Intersection with PAM – NCEI Archiving	J. Price/ B. Woodward	Open
8	Agreement on the ATN Inventory Data Fields/ Investigate the best method of obtaining vital data for the inventory	J. Young/ M. Ogburn/ S. Hayes/ S. Simmons	Deferred

Appendix 1:

ATN Steering Group (SG) Process for Identifying and Funding Priority Observations Draft 2/23/2018

Background

Federal, tribal, state, local, and private partner organizations have a shared responsibility to support sustained, consistent aquatic animal telemetry operations and timely sharing and delivery of high-quality data and data products (ATN IP – Section 2.5.3). This will require stable resource allocations to support ATN operations, the NC, and the DAC within the parameters of existing agency budgets using a variety of mechanisms. Interested Federal, tribal, state, and local agencies and private organizations in partnership with the U.S. IOOS PO will commit annual funds for coordinated activities through the U.S. IOOS RAs or directly with ATN individual partners in support of priorities set forth by the SG, on the basis of the coordination outlined above. U.S. IOOS RAs and individual partners will utilize funds regionally to initiate and support aquatic animal telemetry and telemetry activities (i.e. infrastructure support and maintenance) that would be coordinated with the ATN.

According to the ATN Implementation Plan (Section 2.5.2) priority observations will be of two types. The first will be consistent, long-term baseline observations from satellites, archival tags, and acoustic systems intended as stable resources rather than responses to short-term requirements. The second type of priority observation will be anomalous events: focused observations of animal responses to unexpected events such as warm-water anomalies (e.g., El Niños), oil spills (e.g., the Gulf of Mexico Deepwater Horizon oil spill), and natural disasters. The small and mobile nature of acoustic receivers and arrays, satellite and archival tags, and tagging equipment provides an inherent flexibility that can be used by the ATN. In limited cases or in response to an urgent national need, the ATN may request that assets held by the various regional operators and institutions be tasked with limited-duration, targeted tagging efforts. The U.S. IOOS RAs and SG will nominate targets, with scope and tasking determined by the voting members of the SG.

This document outlines the process by which the ATN SG will identify and establish priorities for selection of animal telemetry observations for funding.

Topic/Project Description Submission

ATN SG members – both federal and non-federal members - can propose topics in support of baseline observations that might be included in an open solicitation for proposals from the science community. SG agency members are encouraged to reach out to experts within their agencies, and non-federal members may reach out to their constituent groups (i.e. those focusing on marine mammals, seabirds, turtles, fish) to generate ideas. ATN topics and projects will also be harvested from the information generated at the regional ATN Workshops. Targeted projects might employ or enhance existing ATN infrastructure and/or capacity (acoustic receiver arrays, tags, and associated equipment). For example, the ATN could collaborate with the OTN to add permanent lines of strategically located acoustic receivers to complement existing infrastructure in the United States Exclusive Economic Zone, maximize national benefit, and form a continental array of receivers. Additionally, the ATN could seek to integrate acoustic receivers with existing U.S. IOOS platforms (e.g., buoys and unmanned autonomous vehicles)

when possible. The integration of ATN instruments with U.S. IOOS platforms will enhance the capability of the ATN to transmit more data at faster rates via the Iridium satellite system.

ATN topics and projects can be considered at any time of year to better align with an agency or an external entity that is providing the funding. Given the federal fiscal year starts in October of each year, agencies typically need to have topics and/or projects aligned well before the beginning of the fiscal year for planning purposes. The ATN SG will use a two-step process to consider and evaluate topic or project ideas, including:

- **Short Topic Descriptions** - brief 1-2 paragraphs description of proposed effort, including notional budget. The topic description is intended to be an informal document submitted to the SG that briefly describes the rationale and nature of the work to be proposed, and how it supports the ATN guidelines and principles and the ATN baseline observations and/or anomalous events, and includes estimates for costs (by federal fiscal year Oct. 1 – Sept. 30).
- **Full Topic Descriptions** - will be 2-5 pages and include a Statement of Work, figures and tables as needed, and a detailed budget in the form of a spreadsheet. Full descriptions will be reviewed by the ATN SG in the fall of each fiscal year—or at other times of the year when sufficient funding exists. Exact timing and dates are dependent upon Congressional budget appropriations.

The ATN SG will review **Short Topic Descriptions** in the spring to summer of each fiscal year; whereas **Full Topic Descriptions** will be reviewed in the summer and fall of each fiscal year—or at other times of the year should sufficient funding exist. Exact timing and dates will be dependent upon Congressional budget appropriations.

Topic Description Evaluation Criteria

SG decisions on **Short Topic Descriptions** and **Full Topic Descriptions** will be based on a competitive review of topic descriptions during regular SG meetings using the following evaluation criteria:

Technical Factors (each factor has equal value)

1. Consistent with the ATN Implementation Plan and guiding principles, and fits within:
 - a. **Baseline observations** - long-term observations from satellites, archival tags, and acoustic systems and their infrastructure intended as stable resources rather than responses to short-term requirements.
 - b. **Anomalous Events** - observations of animal responses to unexpected events such as warm-water anomalies (e.g., El Niños), oil spills (e.g., the Gulf of Mexico Deepwater Horizon oil spill), and natural disasters.
2. Overall scientific and technical merits of the topic description.
3. Potential relevance and contributions of the effort to the ATN funding agency's (-ies') specific mission(s).
4. Leverages existing support and/or assets for aquatic animal telemetry programs in U.S. waters.
5. The offeror's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the topic description objectives.

6. The qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader and key personnel who are critical to achieving the proposal objects; and

Cost Factor

7. The realism of the proposed costs and availability of funds. The ATN will consider topics and projects that include in-kind support from partner Federal and non-Federal entities and equipment support for ATN related activities. For example, the ATN may opt to have a pool of mobile and stationary acoustic receivers available for loan for a period of up to 1 to 2 years. These units can be made available to help expand existing studies into new regions and to allow researchers to collect preliminary data that can be used to form the basis of funding Topic Descriptions to establish more permanent acoustic receiver arrays or can be used for specific events to respond to emergencies.

Overall, the Technical Factors (Factors 1 – 6 above) are significantly more important than the Cost Factor (Factor 7), with the Technical Factors all being of equal value. The degree of importance of cost will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly higher than comparable work as to diminish the value of the proposal's technical superiority to the Government.

Topic Selection Process

Short Topic Descriptions and **Full Topic Descriptions** will be circulated to SG members for review prior to SG meetings. Using the evaluation criteria above, all SG members shall participate in the evaluation and discussions of **Short Topic Descriptions** (spring/summer) and **Full Topic Descriptions** (fall/winter) during regularly scheduled SG meetings. The exact timing and process for topic description review (particularly the Anomalous event monitoring) will depend on Congressional budget appropriations, and timelines may shift and SG review may be done by email review and discussion. ATN SG Voting Members are limited to representatives of the federal agencies that are providing funds for the ATN, or ATN components. In meetings separate from the full SG meetings (as stipulated in the SG ToR) voting SG members will decide on which **Short Topic Descriptions** will be invited to submit **Full Topic Descriptions**, and voting SG members will make selections of **Full Topic Descriptions** for funding.

The SG chair will communicate to the full SG on the outcomes of voting members decisions on **Short Topic Descriptions** and **Full Topic Descriptions**. The ATN Network Coordinator will provide SG feedback to members or persons submitting **Short Topic Descriptions** and **Full Topic Descriptions**.

Funding Mechanisms

There are several potential funding mechanisms to support ATN baseline aquatic animal telemetry observations once needs are identified and prioritized by region. For example, proposals for baseline animal observations and associated infrastructure may be solicited through the National Oceanographic Partnership Program (NOPP) or through existing cooperative agreements on a regular 2- to 3-year cycle. The SG will review and consider changes to the established consistent, long-term priority baseline observations on a regular cycle (i.e. 2-3 years), and with changes initiated only after careful consideration and consultations among the U.S. IOOS RAs, Federal agencies, non-Federal entities, and stakeholders.

