

**TECHNICAL ADVISORY COMMITTEE TO TEXNET
MEETING MINUTES**

June 14, 2018

The Technical Advisory Committee (TAC) to TexNet met on Thursday, June 14, 2018 at 10:00 am CST at the Bureau of Economic Geology, Pickle Research Center, University of Texas at Austin.

Attendees:

Robie Vaughn (Chair); Dana Jurick; Chris Hillman; Hal Macartney; Kris Nygaard; Brian Stump; Scott Tinker; Aaron Velasco (remote); Peter Hennings; Ellen Rathje; Alexandros Savvaidis; Margo Grace; Andy Romanak; Jon Weist; Michael Young

Apologies:

Dan Hill

AGENDA ITEM 1 - Call to Order

The meeting was called in to order by Chairman Vaughn at 10:01 am CST.

AGENDA ITEM 2 - Approval of Minutes 1Q2018

Meeting minutes from March 20, 2018 were presented for approval. Motion was made to approve minutes, and the motion was seconded and unanimously adopted.

AGENDA ITEM 3 - Seismic Network Operations

Dr. Savvaidis begins by giving a brief overview of the Texas Seismological Network, focusing on the DFW, Eagle Ford, and Permian Basin areas. Dr. Savvaidis goes into further detail, describing the different noise levels found in each area and explaining why the stations have the given noise levels.

AGENDA ITEM 4 - Station Deployment Status

First, Dr. Savvaidis begins describing future plans for West Texas, mentioning a plan with University of Houston to add an additional 7 stations in the Midland basin between Midland and Snyder. He gives the reasoning behind this new project stating that University of Houston wants to study recent seismicity reported there between 2008 and 2011. Dr. Savvaidis moves on to his plans for the Delaware Basin, describing the types of sensors he plans to add and the location he plans to add them in. Brian Stump asks if the technology being used in the Delaware Basin is going to be used in the Permian/ Midland basin. Brian Stump mentions to Peter that UTEP has a collection of passive and active sources which could help the group. Peter asks Hal to follow up with UTEP and get back to him with more information.

AGENDA ITEM 5 - West Texas Velocity Model

Dr. Savvaidis starts by detailing the existing stations in the Eagle Ford area. This is followed by a rundown of all future stations and plans for implementation. Dr. Savvaidis mentions the magnitude of completeness for these stations, which leads to a question from Chris Nygaard, regarding the magnitude of completeness. Discussion follows and the issue is clarified.

AGENDA ITEM 6 - Posting Procedural Changes

Dr. Savvaidis explains the layout of seismic stations in the DFW area. He points out a new station and explains it is there because of a recent earthquake near Lake Lewisville. Finally, Dr. Savvaidis points out that they need more access to the Lake Lewisville area and asks if anyone has access.

AGENDA ITEM 7 - Earthquake Location Insights

After giving a brief rundown of different types of data, Dr. Savvaidis goes over a map which shows the velocity profile of Mexico and Texas. He explains what each symbol means and asks for feedback. There are multiple questions from Dana Jurick and Brian Stump in regards to the constraint techniques. A discussion follows with Peter Hennings finally assuring the TAC that the BEG are asking for data and doing their best to obtain it, however it takes time.

AGENDA ITEM 8 - Website Update

First, Dr. Savvaidis goes over the process of earthquakes being reviewed and published. He gives some statistics on the number of reports thus far and explains that they start with and focus on the highest magnitude events. Chris Nygaard voices his concerns with their methods and suggests putting a floor on earthquake magnitudes. A discussion about implementing a magnitude floor follows with Scott Tinker and Mike Young explaining the BEG's future strategies for analyzing earthquakes and how they plan on dealing with the demand for research seismologists.

AGENDA ITEM 9 - Earthquake Event Summary

Dr. Savvaidis details recent changes to the staff, as well as collaborations with other Universities. Scott Tinker emphasizes the vastness of TexNet-CISR pointing to all of the people working on the project that don't work for UT. Dr. Savvaidis and Peter Hennings then speaks about a potential new research thrust, Surface Deformation and Geodetics giving a brief overview of the researchers involved, and their current funding sources. Dana Jurick brings up concerns about the Surface Deformation and Geodetics group jumping to conclusions. Peter agrees and assures Dana that that is not their goal.

Dr. Savvaidis explains the difference between the Cartesian and Spherical models. He goes through multiple examples, explaining how and when each model should and is being used, as well as the pros and cons of each.

AGENDA ITEMS 10 & 11 - Large Event Action Plan / Communication Plan

Dr. Savvaidis begins by updating the team on the website. Next Dr. Savvaidis shows an example of a map and explains that the map along with a summary will go out the first few minutes after an event. Michael Young jumps in and gives a summary of their workings with TDEM, explaining that TexNet is now a part of their communication plan. Next, Michael circulates copies of a document detailing how they will respond to earthquake events. After giving a summary, Michael asks for feedback, posing two specific questions: Is TexNet providing the appropriate information, and would it be helpful to create an earthquake event summary to provide on the fly? A discussion follows about the communication plan.

Action Item: Distribute communication plan

AGENDA ITEM 12 - Legislative Session

Scott Tinker gives an overview of legislative workings, stating that the goal is to get TexNet directly funded. Robie Vaughn gives an overview of the upcoming meetings and the status of appointments, stating that he is waiting to hear who the new appointment manager is. Robie Vaughn goes on to suggest developing a 1-page outline of the goals, objectives, and importance of TexNet which can be used to push for funding. Scott agrees and suggest producing 3 different length forms.

Action Item: Create 3 different length outlines

AGENDA ITEM 13 - Adjourn

Margo Grace adjourns the meeting at 12:02 PM