Detecting flaws and leaks on water pipelines

\* Hello challenge idea 2018. My name is Lonh Sivutha. I am 37 years old, I live in Cambodia and I work as a housekeeper for the SCAO organization. Today I'm interested in challenge idea 2018. I'm so happy to share my idea with challenge idea. I have the dream to become a scientist. I want to make a new technology to find problems on pipe lines.

\* My idea is to make pipes from plastic and to put small fiber cable around the pipe, then put GPS chips on the pipe. Use fail safe electric. Install a software program to control all GPS chips put in the computer. The computer connects with the internet. You need a chip that changes volt electricity to 12V.

\* How it works : All GPS chips work by electricity. When they don't have electricity, GPS chips do not work and can't connect to the computer. The computer will answer where the pipe is broken. To give an example: We make one pipe which is six meters long. Every meter we put one GPS chip so one pipe has six GPS chips. If pipe number 18 is broken, the fiber cable inside the pipe are also broken, then the power can't go to GPS chip number four, so GPS chip number four can't connect to the computer. The computer will answer that pipe number 18 is broken between 3m to 4m of the pipe number 18. So we know where the pipe is broken.

\* How to install the pipe GPS system:

All the pipes connect to each other. One cable connects to the power(P), then connects to fail safe electric and the chip that changes the volt electricity(12V) then connects to fiber cable in the pipe and the fiber cable in the end connects to the GPS chips. One more cable connects to neutral(N) then connects to every GPS chip. All GPS chips connect to the computer by internet.

\* The volt electricity in the pipe is only 12V because GPS chips need only 12V, so there is no danger to people and you do not spend so much power.

\* I want to say thanks to challenge idea 2018 that you let me show my idea. I think this program is very good so people can share their ideas to make new things for the world. I am very happy to join this program.