

The JTF SMART Subsea Cables Initiative
and the
TSUNAMI WARNING, EDUCATION, AND RESEARCH ACT OF 2017

Bruce Howe
27 November 2017

The TSUNAMI WARNING, EDUCATION, AND RESEARCH ACT OF 2017 (TWERA) contains text that is very positive for the SMART cable effort. TWERA authorizes the National Oceanic and Atmospheric Administration (NOAA) to consider integrating environmental observing technologies, such as SMART cables, into the United States tsunami warning system. TWERA adds language that specifically identifies the integration of tsunami sensors into commercial and Federal undersea telecommunications cables as one potential cost effective solution that NOAA should explore. The exact text is extracted below for easy reference, with highlighting.

TWERA provides authorization for undertaking this evaluation but does not appropriate funding. Nonetheless, NOAA has certain discretion to allocate funds to projects of particular timeliness and merit, and JTF has been in contact with NOAA's National Weather Service.

The TWERA is contained within the United States Public Law 115-25, WEATHER RESEARCH AND FORECASTING INNOVATION ACT OF 2017 (<https://www.congress.gov/115/plaws/publ25/PLAW-115publ25.pdf>).

The TWERA amends the Tsunami Warning and Education Act, part of the Public Law 109-479 Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (<https://www.gpo.gov/fdsys/pkg/PLAW-109publ479/pdf/PLAW-109publ479.pdf>)

Text extracted from the
TSUNAMI WARNING, EDUCATION, AND RESEARCH ACT OF 2017

TITLE V—TSUNAMI WARNING, EDUCATION, AND RESEARCH ACT OF 2017

Sec. 501. Short title.

Sec. 502. References to the Tsunami Warning and Education Act.

Sec. 503. Expansion of purposes of Tsunami Warning and Education Act.

Sec. 504. Modification of tsunami forecasting and warning program.

Sec. 505. Modification of national tsunami hazard mitigation program.

Sec. 506. Modification of tsunami research program.

Sec. 507. Global tsunami warning and mitigation network.

Sec. 508. Tsunami science and technology advisory panel.

Sec. 509. Reports.

Sec. 510. Authorization of appropriations.

Sec. 511. Outreach responsibilities.

Sec. 512. Repeal of duplicate provisions of law.

SEC. 504. MODIFICATION OF TSUNAMI FORECASTING AND WARNING PROGRAM.

...

(b) **COMPONENTS**.—The program under this section shall—[from Public Law 109–479]

...

[Modifying the appropriate section of text from Public Law 109–479]

“provide and allow, as practicable, for integration of tsunami detection technologies with other environmental observing technologies and commercial and Federal undersea communications cables”]

SEC. 505. MODIFICATION OF NATIONAL TSUNAMI HAZARD MITIGATION PROGRAM.

...

“(d) **AUTHORIZED ACTIVITIES**.—In addition to activities conducted under subsection (c), the program conducted under subsection (a) may include the following:

...

“(4) **Development of practical applications for existing or emerging technologies, such as modeling, remote sensing, geospatial technology, engineering, and observing systems, including the integration of tsunami sensors into Federal and commercial submarine telecommunication cables if practicable.**

SEC. 506. MODIFICATION OF TSUNAMI RESEARCH PROGRAM.

...

“(b) **RESPONSIBILITIES**.—The research program supported or maintained under subsection (a) shall—”

...

“(1) **consider other appropriate and cost effective solutions to mitigate the impact of tsunami, including the improvement of near-field and distant tsunami detection and forecasting capabilities, which may include use of a new generation of the Deep-ocean Assessment and Reporting of Tsunamis array, integration of tsunami sensors into commercial and Federal telecommunications cables, and other real-time tsunami monitoring systems and supercomputer capacity of the Administration to develop a rapid tsunami forecast for all United States coastlines”**