H.R. 4990, ITS Codification Act As passed by the House of Representatives on July 27, 2022			
By Fiscal Year, Millions of Dollars	2023	2023-2027	2023-2032
Direct Spending (Outlays)	*	*	*
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	*	*	*
Spending Subject to Appropriation (Outlays)	1	4	not estimated
Statutory pay-as-you-go procedures apply?	Yes	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2033?	No	Contains intergovernmental mandate? No	
		Contains private-sector mandate? No	
* = between -\$500,000 and zero.			

H.R. 4990 would authorize and specify responsibilities for the Institute for Telecommunication Sciences (ITS) which is a research and engineering laboratory at the National Telecommunications and Information Administration (NTIA). In 2022, the NTIA allocated \$12 million for the ITS.

H.R. 4990 would require the ITS to work on developing emergency communication and tracking technologies to locate trapped individuals in confined spaces, such as underground mines. Using information from the NTIA, CBO estimates that this would require four additional engineers and technicians, at an annual cost of about \$150,000 each; simulation software licenses, travel costs, and other miscellaneous expenses, at an annual cost of about \$100,000; and one-time equipment purchases for items such as a signal generator, a vector signal analyzer receiver, and a power amplifier for about \$500,000 in 2023. In total, CBO estimates that implementing this provision would cost \$4 million over the 2023-2027 period; spending would be subject to the availability of appropriated funds.

The act also would require the ITS to study radio frequency emissions, determine spectrum propagation characteristics, and test technologies that enhance spectrum sharing between federal and nonfederal entities, among other activities. Because the ITS works on those activities under current law, CBO estimates that implementing those requirements would have no additional costs.

H.R. 4990 would authorize the ITS to accept funds from nonfederal entities to perform analyses and carry out studies. CBO expects that any such donations, which are classified in the budget as offsetting collections or reductions in direct spending, would be spent soon thereafter, resulting in a negligible net effect on direct spending.

The CBO staff contact for this estimate is David Hughes. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.