WASHINGTON (AFP) — US lawmakers on Thursday pressed for the release of an Iranian-American pastor imprisoned in Tehran over his work with underground churches, urging the use of all diplomatic efforts.

In a letter to Secretary of State John Kerry, 84 senators and House members across the political spectrum urged him "to exhaust every possible option" to secure the release of naturalized US citizen Saeed Abedini.

Representative Trent Franks, a conservative Republican from Arizona who helped lead the effort, said in a statement that Abedini's case needed Kerry's "immediate and personal attention."

Representative Henry Waxman, a left-leaning Democrat from California, said that Abedini's detention "exemplifies Iran's flagrant violation of human rights and religious freedom."

"We hope that this letter, with its deep support from all across America, will show Saeed Abedini that he is not alone and that we have not forgotten him," Waxman said.

Abedini, who converted from Islam to Christianity, was arrested in September on a return trip to Iran. He was sentenced last month to eight years in prison on charges of disrupting national security by promoting underground churches.

Abedini's family said he took part in house churches when they were largely tolerated a decade ago under reformist president Mohammad Khatami. The family said he abided by an agreement he made in 2009 after a previous detention to halt such activity.

Iran's constitution following the 1979 Islamic revolution recognizes the rights of several religious minorities including Christians, but the clerical regime has targeted converted former Muslims.