Over recent years, the technologies for electronic artillery fuzes, and in particular proximity fuzes, have been considerably enhanced. The most important developments concern improved target detection achieved by the use of miniaturized radar sensor technologies. This new type of radar sensor mainly relies on the use of Frequency Modulation Continuous Wave (FMCW) principle together with microwave electronics and digital signal processing. So far these modern solutions have been applied only to modern proximity and multi-function fuzes for field artillery and mortar. As far as the domain of air-defence and naval fuzes is concerned, the available products still rely on the Doppler detection technique. The use of such state-of-the-art sensors in naval artillery fuzes brings new challenges when it comes to air-target detection. JUNGHANS is now able to implement this technology, which brings significant performance benefits, in particular to attack targets flying at a very low altitude, in presence of sea clutter. JUNGHANS has recently been awarded by the French MoD a full-development contract of a new generation multi-function fuze for large calibre naval artillery. The paper will present sensor technology introduced in this new product as well as the related performances and results obtained at this stage of this development program.