

### Defense System Against Short Range Artillery Rockets

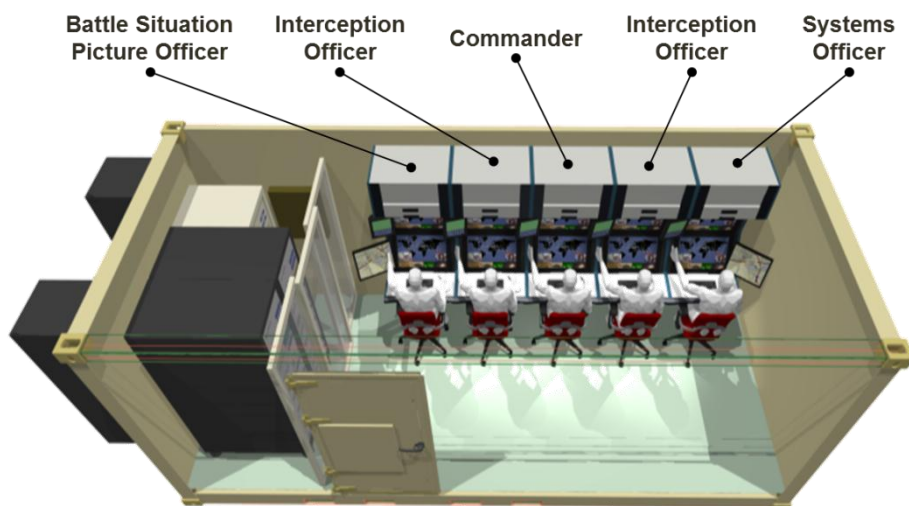
The Iron Dome is an effective and innovative mobile defense solution for countering short range rockets and 155 mm artillery shell threats with ranges of up to 70 km in all weather conditions, including low clouds, rain, dust storms or fog.

The system uses a unique interceptor with a special warhead that detonates any target in the air within seconds. The Iron Dome is a cost effective system that can handle multiple threats simultaneously and efficiently.

The Iron Dome system has been selected by the Israeli Defense Ministry as the best system offering the most comprehensive defense solution against a wide range of threats in a relatively short development cycle and at low cost.



### mPrest part in the "Iron Dome" project



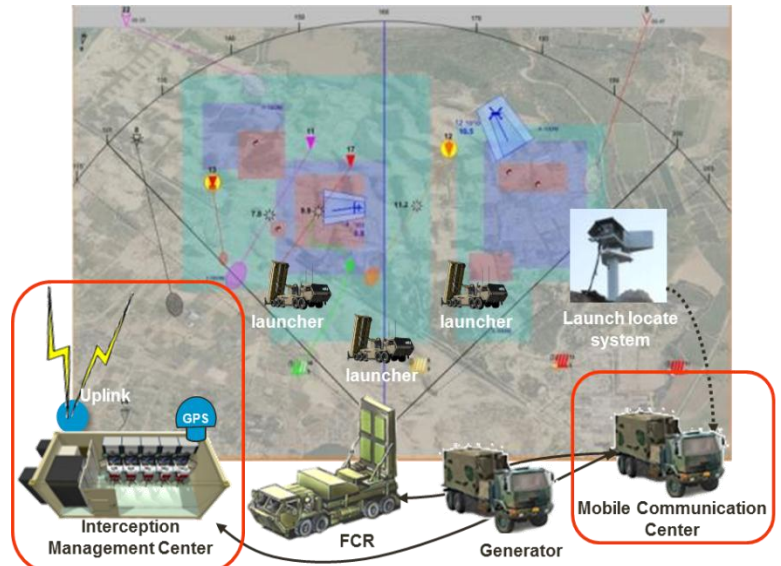
mPrest develops the C<sup>4</sup>I system for Israel's strategic short range rockets interception system, Iron Dome (Kipat-Barzel), developed by Rafael. The C<sup>4</sup>I system is responsible for the air awareness picture building, target classification, calculating interception programs and controlling launch and interception processes. The C<sup>4</sup>I is a distributed, high performance, low latency fault tolerant application, based on Microsoft .Net framework, including several computing nodes and operator consoles, which are able to operate autonomously or integrated with other Israel Air Force systems.

### Iron Dome System Operation

The Iron Dome radar detects and identifies the rocket or artillery shell launch and monitors its trajectory. Target data is transmitted to the Battle Management & Weapon Control (BMC) for processing. The threat's trajectory is quickly analyzed and the expected impact point is estimated.

If the estimated rocket trajectory poses a critical threat, a command is given within seconds and an interceptor is launched against the threat.

The interceptor receives trajectory updates from the BMC via uplink communication. The interceptor approaches the target and uses its radar seeker to acquire the target and guides the interceptor within passing distance. The target warhead is detonated over a neutral area, therefore reducing collateral damage to the protected area.



### Iron Dome System Mission Sketch

