vehicles beyond 1,000 m. ...[It] will exploit lightweight, high-strength materials [, a] modular opto-electronic full solution fire control (leveraged from the OICW... program) [,] electronic time-set fusing [and] high-explosive air-bursting munitions. The OCSW will be a lightweight, two-man portable, single replacement weapon system for the current 40 mm MK19 Grenade Machine Gun and the Caliber .50 M2 Heavy Machine Gun. ...Technical challenges for the OCSW include efficient fragmentation, electronics miniaturization (fire control and fuze), systems integration, and overall system weight".

The cost of the OICW is estimated at about US \$10,000 and the cost of the 20 mm grenade is approximately US \$30.⁶⁴ It is unlikely that this weapon system will be licensed for production elsewhere in the foreseeable future. Its unique 20 mm grenade ammunition, together with its built in digitized sighting and arming devices, cost and security concerns would seem to militate against this. Sales to close allies are possible and purchases by other potential customers could involve a slightly degraded capability export model, something not uncommon with military equipment exports. The cost of the OCSW could be two to four times as much as the OICW. It too is unlikely to be sold to states other than close allies. It should also be kept in mind that regardless of current developments there is no guarantee that the weapons in question will enter into operation as designed or in the numbers projected.⁶⁵ For example, the OICW could, for a number of reasons, become a single squad or fire section weapon not issued to all soldiers.

PAPOP (Polyarme Polyprojectiles) France

The PAPOP is essentially a French version of the OICW.⁶⁶ Like the OICW, this rifle is of a 5.56 x 45 mm caliber. The main difference between the two systems is that the grenade launcher on top of PAPOP is a 35 mm projectile. However, it is supported by a digitized state of the art individual support system similar to that of the American "Land Warrior". A project with the acronym FELIN is developing a system of add-on modules (separate but compatible with PAPOP) that provide the soldier

⁶⁵ In the 1950s the US conducted \$30 million worth of R & D on a flechette and grenade-firing Special Purpose Individual Weapon (SPIW). Testing took place over 20 years, and involved various prototypes and contractors. The 10 grain serial flechette ammunition may have been the most lethal ever produced. For numerous reasons, many political, the SPIW was never produced. Source: http://www.wwa.com/~dvelleux/future.html

⁶⁶ There is very little information on the PAPOP. Primary sources were: Terry Gander, "PAPOP: the French OICW emerges," *Jane's International Defense Review*, p. 16; "France's next century 'soldier system'," *Jane's Defense Weekly* (10 June 1998), p. 11.

⁶⁴ US Army Armament Research. Development and Engineering Center, Joint Service Small Arms *Project Information Paper: OICW* (8 May 1998).