*Shooting* [*K*2]: The threat projects one or more passive projectiles (e.g., bullets, mass-driver, rail-gun slugs) toward collision with the target; damage is caused by impact.

*Mining* [K3]: The threat carries an explosive device, triggering it in such a way that shrapnel impinges on the the target; damage is caused by impact.

*Torpedoing* [K4]: The threat releases subsatellite(s) having autonomous capability at low (relative) speed, which employ harm modes K1, K2 or K3.

## 5.3 Directed Energy Modes of Harm

Seven harm modes in the Directed Energy class can be cited. In brief, these are as follows:

*Ramming* [D1]: The threat directs a concentrated beam of light toward the target, causing damage to light-sensitive components in the target.

*Shocking* [D2]: The threat applies a differential electric field to the target via electron or ion beam, damaging the target by electrical discharges.

*Beaming* [D3]: The threat deposits energy onto the target via laser beam, ion beam, particle beam, reflected sunlight, or other nonpenetrating radiation, at a power level sufficiently high to damage the target by heating.

*Heating* [D4]: The threat radiates heat onto the the target, causing damage to heat-sensitive components.

*Overloading* [D5]: The threat deposits excessive electromagnetic energy into an EM receiver on the target, damaging the receiver.

*Blasting* [*D6*]: The threat deposits energy onto the target via laser beam, ion beam, particle beam, etc., at a very high power level, causing structural damage to the target from the resulting mechanical shock wave.

*Irradiating* [D7]: The threat applies a beam of penetrating radiation to the target, damaging sensitive electronic or other components.