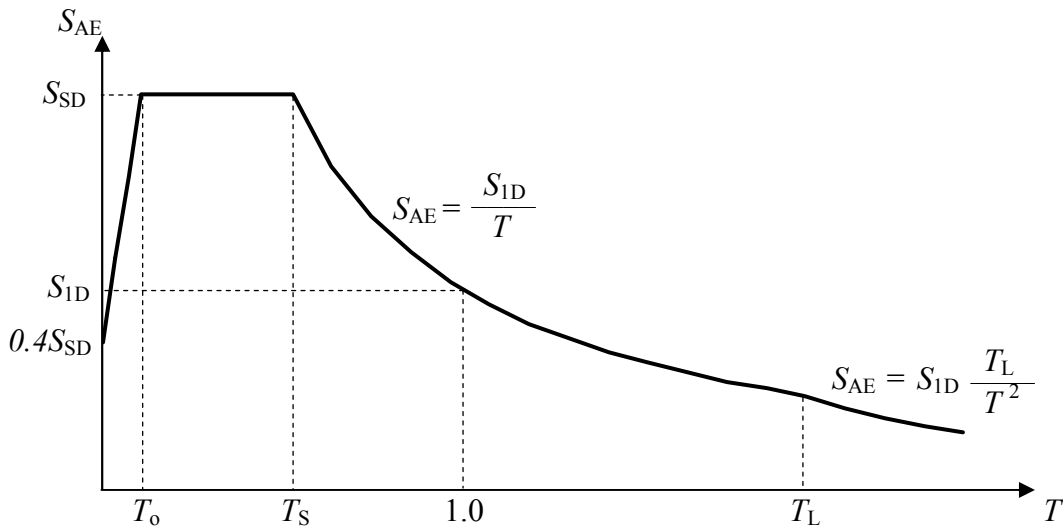


**Table 1.1. Short period and 1.0 second elastic spectral accelerations**

Soil Class	Earthquake Level					
	(E1)		(E2)		(E3)	
	$S_{SD} / g$	$S_{1D} / g$	$S_{SD} / g$	$S_{1D} / g$	$S_{SD} / g$	$S_{1D} / g$
<b>A</b>	0.080	0.032	0.120	0.053	0.180	0.080
<b>B</b>	0.100	0.040	0.150	0.067	0.225	0.100
<b>C</b>	0.120	0.068	0.180	0.113	0.270	0.170
<b>D</b>	0.160	0.096	0.240	0.160	0.360	0.240
<b>E</b>	0.250	0.140	0.375	0.233	0.563	0.350
<b>F</b>	Site-specific geotechnical investigation and dynamic site response analysis required (see <b>Annex A</b> )					

**Figure 1.1. Elastic Response Spectrum**

**1.2.2.3** – When required, elastic acceleration spectrum may be determined through special investigations by considering local seismic and site conditions. However 5% damped acceleration spectrum ordinates shall in no case be less than those determined by **Eq.(1.1)** based on short-period and 1.0 second spectral accelerations given in **Table 1.1**.

**1.2.2.4** – Elastic response spectrum representing the vertical component of earthquake ground motion may be taken as half the value of the corresponding to horizontal component.

### **1.2.3. Representation of ground motion in time domain**

**1.2.3.1** – A minimum three or seven sets of earthquake ground motions (acceleration records in two perpendicular horizontal directions) with the following properties shall be selected for the analysis to be performed in the time domain. Real acceleration records may be obtained from the following data banks:

Cosmos Virtual Data Center <http://db.cosmos-eq.org/>

Peer Strong Motion Database <http://peer.berkeley.edu/smcat/>