To understand the character of reserves, one has to understand the total resource box, which covers everything which is available on Earth: reserves, resources and geopotential (see Figure 1).

a) **Reserves** are defined as the category of total resources that can be economically extracted with proven technology and current economics (including available energy and environmentally and socio-economically acceptable conditions).

b) **Resources** are known (to various levels of certainty), but are not economically viable at present.

c) The **geopotential** is not yet known but, by geologic reasoning, it can be expected to contain deposits that will be discovered by future exploration technologies.

The boundaries are always dynamic. What are resources today can be reserves tomorrow and vice versa. This applies also to the boundary between geopotential and reserves and resources. Due to exploration work or technological development geopotential can become reserves and resources. With respect to quantifying all reserves and resources, no company or institution has the interest or the means to do so. In general, companies only spend money, at a high risk, on exploration if they can bring the deposits quickly into production. In consequence, quantitative of reserves and resources can only be a snapshot within the dynamic process of resource evaluation.

Concerning reserves we also have to take into account the perspective:

a) For **companies**, reserves are their working inventory. They, therefore, normally only gather data and estimate reserves for as many years of production as the cost associated with obtaining the data and their preference for business planning justify; i.e., the reserves may be more dependent on business planning models and investment alternatives than on the magnitude of minerals in the ground. These reserves normally have to comply with the JORC/CIM code for reserve reporting, today one of the international standards.

b) Looking at **government bodies**, regional planning authorities often have to plan further ahead. The quantities have to be economically extractable before the planning permits are granted. But the “modifying factors” (like legal, environmental, social, and