

MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM (E8)  
MULTILINGUAL ASTRONAUTICAL TERMINOLOGY (1)

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## MULTI LANGUAGE EMPOWERMENT

**Abstract**

In space science, as in other sciences, it is the goal to have a discipline specific vocabulary in the native language of every participating nation. Apart from English, a well established vocabulary of space terminology already also exists in French and German. The same is true for Spain, Italy, Russia, India, Korea, Japan, China and several others. What is lacking to enhance communication and intelligibility between different participants, is a multilingual dictionary of space sciences terms in all these languages. Such a multilingual terminology list of equivalences can also be automatically processed by defining a pseudo language as part of the multilingual dictionary. This paper illustrates the success of such an approach by means of a multilanguage computer compiler and interpreter, called ABAKUS, which was used with great success at Stellenbosch University. This approach allows nonformal languages to be used interchangeably, for example an abbreviation based language. The ABAKUS system allows open ended additions of new languages, provided that equivalent words exist in them. The present initiative of the International Academy of Astronautics (IAA) to compile such a multilingual space sciences dictionary must be supported, as it is indirectly an instrument to empower newcomers to space to think and communicate with each other in their own mother tongue, without being isolated from the international space community. Presently an Afrikaans addition to this multilingual dictionary is being compiled by a group in Stellenbosch, because a well established space sciences terminology already exists in Afrikaans as a result of previous space activities in South Africa, stretching over more than half a century. Afrikaans is one of eleven official languages in South Africa (nine of which are indigenous African languages), and is a fully developed academic and scientific language used at university level. As a Germanic language, it can draw on technical terms in German and Dutch. At the same time, a pseudo language will also be tabulated next to the English, French, German, Afrikaans and other languages, as a future aid in automating translations effectively. The ideal for the South African people will be to consider augmenting this dictionary with some of the other nine indigenous South African official languages, when desired by the particular language group.