

**Valuation of Airspace and
Subterranean Rights**

*LOW SER SEAH, FRICS, FSISV, FSOCREA,
LICENSED APPRAISER
Managing Director
Cosmo Property Consultants Pte Ltd*

9TH ASEAN VALUERS ASSOCIATION CONGRESS

WORKSHOP PAPER ON

" VALUATION OF AIRSPACE AND
SUBTERRANEAN RIGHTS "

by

LOW SER SEAH, FRICS, FSISV, FSOCREA,

LICENSED APPRAISER

Managing Director

Cosmo Property Consultants Pte Ltd

Valuation of Airspace and Subterranean Rights

ABSTRACT

This paper discusses the methods of valuation of defined or as-built airspace and subterranean space as well as the methods of valuation on developable airspace and subterranean rights.

Valuation of Airspace and Subterranean Rights

The Singapore Land Titles (Strata) Act provides " land " to mean :-

- " (a) the surface of any defined parcel of the earth, all substances thereunder and so much of the column of airspace above the surface whether or not held apart from the surface as is reasonably necessary for the proprietor's use and enjoyment, and includes any estate or interest therein and all vegetation growing thereon and structures affixed thereto ; or

- (b) any parcel of airspace or any subterranean space held apart from the surface of the earth and described with certainty by reference to a plan approved by the Chief Surveyor and filed in the Survey Department and includes any estate or interest therein and all vegetation growing thereon and structures affixed thereto :-

where the context so permits, the proprietorship of land includes natural rights to air, light, water and support and the right of access to any highway on which the land abuts " .

The Land Titles (Strata) Act provides for the subdivision of land into strata : apartment, shop, office, car park units. The airspace or subterranean space is defined in a Surveyed plan showing the full dimensions including the height. A convenient term for such airspace or subterranean space is " as-built " .

For such " as-built " airspace or subterranean space the valuation is normally done by the comparable method of valuation.

In the case of a car park whether it is a subterranean space or airspace the valuation approach is normally done by the profit method of valuation taking into consideration the number of parking lots, the occupancy rate, the parking charges, the location, the number of parking lots reserved for season parking and the number of lots available for short-term parking. If the car park is leased to a car park management company the valuation approach is the Investment Method.

In the valuation of airspace or subterranean space not governed by the Land Titles (Strata) Act the approach is the residual method of valuation. In arriving at the value the factors for consideration include the permissible type of development, the extent of development, the depth and height of the subterranean space and airspace.

For the valuation of subterranean space it is also necessary to consider the development cost.

This is necessary as the cost of constructing structure in the subterranean space could be prohibitive.

The same principle applies in the valuation of large area of airspace rights unless the airspace right comes with the subterranean rights at selected locations. Without the subterranean rights the development cost is substantial due to long structural span.








The valuation of subterranean or airspace rights, taking into consideration all the factors, could only be possible for a limited right whereby the space could be utilised structurally. Any large space of airspace is not possible unless it is implied that it includes subterranean rights at selected locations.

For subterranean rights in the valuation it is necessary to consider whether it includes the temporary right of the air space as well as the right to have additional subterranean rights at selected locations to accommodate the foundation.

The valuation of subterranean and airspace as clearly defined space is not a problem.

However, in the valuation of subterranean and airspace one must know the exact defined space.

LOW SER SEAH - BIO DATA

-  Fellow of the Royal Institute of Chartered Surveyors
-  Fellow of the Singapore Institute of Surveyors and Valuers
-  Fellow of the Society of the Singapore Institute of Surveyors and Valuers Accredited Estate Agents
-  In the Real Estate Profession since 1968
-  The Managing Director of Cosmo Property Consultants Pte Ltd since 1981 to present and Managing Director (Honorary Position) of SISV Services Pte Ltd since 1990 to present
-  President of the Society of the Singapore Institute of Surveyors and Valuers Accredited Estate Agents
-  Part-time lecturer for the Singapore Institute of Surveyors and Valuers Courses (Property Management and Maintenance Course and Diploma in Real Estate Marketing)