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Scottish Assessors Association

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Utilities Committee

Practice Note 1
Valuation of Wireless Telecommunications Subjects

1.0 Introduction

1.1 This Practice Note is applicable to subjects occupied by mobile operators and infrastructure providers. It also covers large TV and Radio broadcast sites.

This Practice Note does ***not***, at present, extend to masts considered to be part of the "Mobile Infrastructure Project" (MIP) which is designed to improve coverage in remote locations with little or no mobile telephony service.
Appendix D contains a glossary of the terms used in this Practice Note

2.0 Basis of Valuation

2.1 The nature of the entries to be made in the Valuation Rolls is governed by the Non-Domestic Rating (Telecommunications and Canals) (Scotland) Order 1995/239.

2.2 The primary method of valuation will be Comparative but, in many instances, there will be a hybrid of the Comparative and Contractors approaches.

2.3 The nature of occupation will determine the approach to valuation. It has been determined that the 1995 Order directs that each mast installation must be valued as if it existed in isolation but, for administrative convenience, the individual values may be aggregated within a cumulo valuation for each host and operator in each council area; the total value in the cumulo will be a combination of host and sharer valuations and will vary with the balance between hosting and sharing.

3.0 Classification

3.1 The subjects covered by this Practice Note can be classified within the following broad groups (photographic examples are at Appendix A):

3.1.1 Cable only

In this case the sharer will share accommodation provided by the host but attach their own cable to their equipment on the mast. The subject of valuation in these cases is identified as the cable alone.

3.1.2 Pico Cells

This term in the industry refers to what are a type of micro cell site of short coverage, mainly indoor, but can be installed outdoors, where coverage is poor or there are a high number of users e.g. airports, offices, etc. They are effectively an antenna attached to a wall or ceiling that is similar in looks to a smoke detector or burglar alarm plus a hidden box of equipment. Some such small-scale installations are installed within private premises to enable use by staff or visitors: e.g. hotel premises. Unless these are in the paramount occupation of the network operator they are deemed unum quid with the premises and are de minimis in terms of value.

3.1.3 Streetworks

This is a distinct class of telecoms structure comprising a pole and cabinet erected on the public highway under the New Roads and Street Works Act 1991 or Roads (Scotland) Act 1984.

It must be stressed that to be classed a Streetworks, the installation must be within the bounds of the public highway and erected under the above legislation. A mast situated near the pavement but on private land is considered a Greenfield installation – see 3.1.5.

The absence of any rent or fee for the placing of such equipment within the bounds of the highway does not result in a nil value in terms of site element in value. See Orange v Bradford (VO), 2003.

The levels of value applicable to Streetworks installations are at 6.4

Some streetworks sites are now shared; principally O2 and Vodafone sites. In such circumstances, the greenfield payaway addition should be included in the host's valuation. The likelihood is that these sites will diminish as new technology is installed to enable both operators to transmit using the same equipment. It is understood some sites already have the new technology installed.

3.1.4 Rooftop

This is the term for a wireless telecommunications site generally located on the roof of a building or other existing structures e.g. silo, water tower, floodlights. These are usually found in cities and major towns and can often be seen on top of high buildings (residential tower blocks, office blocks, shopping centres, etc.).

It is important to stress that the term "rooftop" extends to include installations on existing structures other than masts specifically designed and built to host telecommunications equipment.

3.1.5 Greenfield

Greenfield is a generic term used to describe ground based installations usually held on a lease, i.e. those which are not installed on existing rooftop or streetworks sites.

It refers to an installation located in either rural (farmland/hilltop) or city surrounds (such as brownfield industrial land).

This type of site forms the majority of wireless telecommunication sites in Scotland.

3.1.6 Base Station Controller

This refers to sites which tend to have more micro wave dishes for the transmission and receiving of telecommunication point to point signals. The number of these installations in Scotland is limited and these are predominantly on shared masts.

Other operators may describe these as “Transmission High” sites. Whether or not identified separately, all operators have such sites; a central focal point being a functional requirement of a mobile telecommunications network.

It is often difficult to determine a BSC from a visual inspection so there is a reliance on the Operators to provide this information.

On the returns formerly received from Orange these sites are identified with the description Base Station Controller or BSC. On returns from H3G they are identified as Transmission High or THS.

Whilst these can be clearly identified on the above mentioned returns, further input may be required from Vodafone and EE Ltd. On returns from Vodafone the term MSC is used but this does not identify them in all cases. Vodafone and former T-Mobile sites may not identify such sites but where the Sharer Payment was, at Tone Date, £25,000 and over it should be assumed that these are the equivalent of a BSC.

3.1.7 Terrestrial Broadcast Stations

These are large masts, normally between 100m and 320m in height, with a main purpose of providing terrestrial TV and radio broadcast services. The lower reaches of such masts may also be used to host cellular telecommunication antennae and microwave communication antennae.

Smaller masts may also be involved in the provision of terrestrial TV and Radio broadcast services. These were built originally to service areas with poor reception from the main broadcast sites.

4.0 Survey and Measurement

4.1 The total site area and all surfaced areas should be determined separately. Any buildings should be measured to Gross External Area and the specifications of all rateable plant and machinery should be recorded.

In particular, the following should be noted:

- Geographic location including Ordnance Survey coordinates,
- Site elevation,
- Type of location – for example, Greenfield or Rooftop,
- The size and nature of any compound,
- The type of mast,
- The height of the mast,
- The number of separately identifiable banks of antennae and occupier, if possible,
- The number and approximate diameter of any microwave dishes,
- The type of power supply and length of spur from main supply,
- The number and size of buildings, cabins and cabinets,
- Photographs showing the main elements.

4.2 The approach to valuation is influenced by the nature of occupation so survey data should include details of and the relationship between the parties in respect of:

- Land (site) ownership and tenancy,
- Mast ownership and any letting to 3rd Party Infrastructure Host,
- Mast and site occupation.

5.0 Type of Occupation

5.1 The main determining factor on level of value is the type of occupation an Operator has on a telecommunication installation. The Operators can occupy a telecommunication installation as either a Host or a Sharer.

5.1.1 <u>Host</u>

This refers to the party developing the tower. The host usually leases a piece of ground from the landowner and erects a tower to allow transmission and reception of signals within that party's own network. The party developing the tower can be the mobile operator.. The host may also be solely in the business of developing such installations to enable sharing opportunities for telecommunications operators. Companies such as these are called infrastructure providers (e.g. Arqiva, Wireless Infrastructure Group, Spyder).

For the purposes of valuation, a mast host who also broadcasts (uses the mast for the purposes of transmission and receipt of radio frequency signals) shall be deemed to have the right to broadcast included in the rent payable to the superior landlord and the value of this right will be reflected in the site rent. All other occupation of a mast should be considered as a sharer and a "payaway" addition appropriate to the nature of occupation (Greenfield, BSC

or Cable only) made to the Host Value, irrespective of who the Sharer might be. This can include but not limited to such as Airwave (the Emergency Services network), Arqiva/Sensus “Smartmeter”, British Telecom, Cable & Wireless or any other Telecoms company. Miscellaneous other sharers might include, taxi firms, haulage firms and the Civil Aviation Authority. The payaway addition is defined below. *Ay equipment located on structures other than bespoke telecoms masts (Greenfield or Streetworks) are to be treated as equivalent to “rooftop” sites. In other words, there is no inference that the hypothetical lease of such as a pylon, a silo or a building, includes any right to use that structure for the purposes of radio transmission/reception.*

Although uncommon, certain rooftop installations will involve a site (building) owner, a host (mast developer) and sharers (operators). These interests should be valued as if they were in a normal host:sharer situation albeit the level of value may differ.

An increasing number of “Streetworks” installations are being erected with newer, larger and stronger masts. Installations may be shared and, in such circumstances, the various interests should be valued as if they were in a “Greenfield” situation albeit using levels of site value appropriate to “Streetworks” installations. These interests should be valued as if they were in a normal host:sharer situation albeit the level of value may differ.

The term “host” can be taken as being synonymous with “Proprietor” for the purposes of the valuation roll.

5.1.2 Sharer

This is the industry term used for a telecommunications operator who, under an agreement, attaches antennae on a host mast or other structure and occupies an area within a fenced compound, on a rooftop or a separated area within another building for transmitting and receiving equipment and its accommodation. The term can be taken as being synonymous with “occupier”.

In a number of situations, a “cable-only” operator may occupy space within another operator’s equipment rack within that other operator’s cabin(et). In such circumstances no addition will be made for the cabin(et) in the “Cable–only” operator’s cumulo entry although the “payaway” will continue to be added to the host value for the right to install antennas. A “Cable only” value will be applied to that Operator.

A Sharer can either be a wireless telecommunication operator, say Vodafone, on an Arqiva host mast, or it can be, for instance, a site where Vodafone host and the site sharer can be H3G or vice versa. There can be multiple site sharers on the one mast.

Note that those companies named in the current list within Section 7A of the Non-Domestic Rating (Valuation of Utilities) (Scotland) Order 2005 (as amended) will not have any separate addition made in respect of any cabin(et); that is to be deemed as included in the relevant Utilities entry in the Valuation Roll for Renfrewshire Council.–The 2005 Order is replicated in appendix B to this Practice Note. *NB, the 2005 Order is updated annually and reference to the on-line version will give the most accurate list of the telecommunications companies falling under that Order.*

5.1.3 Unoccupied Masts

Ongoing network rationalisation may result in masts or installations becoming "silent". In other words, the site compound and mast will remain in place but will not be in operation. This may be a situation that will persist pending the dismantling of the structure or change to other broadcast/transmission use. Under no circumstance should the value of the site, the site works or the mast structure be amended until the mast has been dismantled and removed from the site. The addition for "Payaway" (see 6.2.5) may be amended as the number of sharers changes. There may be occasions where rateable equipment is removed. The value may be altered accordingly in such circumstances. The unoccupied masts shall remain within the cumulo entry for the Host until such times as it is dismantled and removed or it is transferred to an alternative occupier.

An extract of the relevant section of the Non-Domestic Rating (Telecommunications and Canals) (Scotland) Order 1995/239 is at Appendix B

6.0 Method of Value

6.1 The Unit of Valuation

The unit of valuation is a single telecommunication installation that may be aggregated with others in the same occupation in the same local authority area so as to derive a cumulo valuation.

Regardless of whether or not a Host transmits from a telecommunications installation, the value of an installation is predominately with the Host.

6.2 Level of Value

The level of value applied to the Host of a telecommunication installation is determined by four factors:

(1) Site Value
(2) Rateable Items
(3) Equipment Accommodation
(4) Sharer Additions

All cost figures calculated below include contract size, location factor and fees so no further adjustment is required. There is no evidence to support and, therefore, no requirement to make any adjustment for Age and Obsolescence in respect of the mast, the mast equipment, the site security equipment or "stock item" cabins or cabinets.

An obsolescence allowance might be considered for larger buildings where there is an over-provision of space due to miniaturization of equipment; such an allowance would be a matter of fact and degree. At present no further allowance other than that determined by the notional age of the

building should be applied. Basic Principles PN 2 will provide guidance in terms of age and obsolescence allowances.

6.2.1 Site Value

In the absence of local evidence, the following levels of value should be applied to the site as determined by the type of installation and the type and height of the mast:

Installation Type	Mast Type	Mast Height	Site Value (NAV)
Pico	n/a	n/a	£2,700
Greenfield and Broadcast Masts	All Monopoles and Towers	<= 30m	£5,000
		30.01m – 45m	£7,400
		45.01-60.00m	£8,750
		60.01-151.00m	£9,000
		>151m	£27,000
Other TV/Radio and other broadcast masts	Guyed Masts	30.01m – 151.00m	£7,500
	Single guyed mast radiator	All	£7,500
	Pair guyed mast radiator	All	£11,250
	Single and paired guyed mast radiator	All	Local Evidence
Rooftop	All	All	£9,000
Base Station Controller	All	All	£15,000

NB: “Mast Radiators” are rare. These are masts where the structure acts as an antenna and is “live”. No other antennae can be attached to such a mast. The normal installation will have a mast that is simply a supporting structure and where the aerials are insulated from the structure.

6.2.2 Rateable Items (Pico sites, and Rooftop sites only)

The following levels of value should be adopted for rateable items only in the case of the above type of sites. The figures shown are INCLUSIVE of any siteworks,power supply and equipment accommodation, and is the total NAV to be added to the site value for rateable items:

Installation Type	Mast Type	Mast Height	Rateable Items (NAV)
Pico	n/a	n/a	£100
Rooftop	Attachment to structure	n/a	£2,300
	Stub Tower (up to 5m in height)	All	£2,300

Other rooftop masts may be looked at individually and, if costs are available, they may be preferred to the above guidance. Otherwise, use rates from 6.2.3 below.

6.2.3 Rateable Items (Greenfield Installations)

The mast types at Greenfield installations are far more varied in their nature to the installations shown at 6.2.2 above and as such a more detailed valuation may be required.

In addition to equipment accommodation, the valuation is made up of three different elements:

(A) estimated replacement cost of the mast including the foundation

(B) siteworks which includes site preparation, surfacing and fencing

(C) power supply

See 6.2.4 for Equipment Accommodation

Greenfield tower and monopole installations up to 25m ht should be valued at the all-inclusive valuation shown below:

Element	**NAV**
Site Value	£5,000
P&M	£3,000
Total NAV	**£8,000**

Other mast heights and types should be valued using the table overleaf

A – Mast – Estimated Replacement Costs/...

A – Mast – Estimated Replacement Costs (ERC)

N.B. The cost rates below are inclusive of location factor, contract size and fees and no further adjustment is needed. ***(interpolate for intermediate heights as necessary)***.

MAST TYPE	MAST HEIGHT	£/m of HEIGHT
Monopole	All	£1,200
Tower	26m - 36m	£2,100
	45m	£7,085
	60m	£8,310
	75m	£9,400
	90m	£10,515
	105m	£11,585
	130m	£13,570
	150m	£15,170
Stayed Lattice Mast & Guyed Radiator Mast	30m	£2,495
	45m	£2,725
	90m	£3,325
	135m	£4,790
	180m	£6,375
	225m	£8,160
	270m	£9,995
	315m	£11,625

B – Site Works

Site Works for smaller installations may be reflected by the addition of **£345 NAV** (£7,500 Cost). Where full facts are known, a valuation of the site works using the cost guide will provide the best approach to valuation.

C – Power Supply

The **Power Supply**, in the main can be stated at **£645 NAV** (£14,000 cost). For more remote or larger installations, a maximum of **£2,300 NAV** (£50,000 cost) can be added.

6.2.4 Equipment Accommodation

In addition to the rateable items calculated from the tables above an addition requires to be made for the equipment accommodation and cable.

Where there is a **GRP or steel cabin, or a cabinet or an array of cabinets,** in the occupation of a single operator, an addition **of £600 NAV** should be made to include cabin(et) and cable.

Where there are permanent buildings on site, then use appropriate rates/m² from the 2017 cost guide with an addition of £100 for cable.

It may be appropriate to apply an alternative method of value to large-scale buildings if the construction is out of context with the cabin or cabinet typically found at Telecoms sites.

Such additions to value for equipment accommodation should be added to the appropriate cumulo value for that operator.

6.2.5 Sharer or "Payaway" Addition

For each "Sharer" occupation, other than minor sharers, on a structure an amount shall be added to the value that is attributable to the base value of the structure (the site rent and rateable plant and machinery). This addition is commonly referred to as the "Payaway". A minor sharer is defined as a sharer paying less than £1 200 per annum at the tone date.

Where the host also broadcasts from the site, then an addition should be made for all other sharers. **If the host does not broadcast, then one sharer should be deducted** from the total as the site rent includes the right for one party to broadcast. The sharer which should be deducted is the first sharer on site and is not necessarily the most valuable addition: i.e. a Base Station Controller Sharer. In most instances, all sharers will be of equal value and no decision on which named sharer to deduct will be required.

Dependent on the nature of the Sharer's installation, the following NAV should be added to the host's site value for each such installation type.

Greenfield and Streetworks Sharer	£2,900
Rooftop Sharer	£4,800
Base Station Controller Sharer	£9,400

6.2.6 **Age and Obsolescence**

Site Works Power Supply and Buildings

No age and obsolescence allowance should be applied to the standard NAV additions detailed at sections 6.2.3 B, 6.2.3 C and 6.2.4: namely £345, £645 and £600 respectively; appropriate age and obsolescence allowances should be applied to other such items valued using unit cost rates from the Cost Guide.

Masts & Towers

In general no age and obsolescence allowance should be applied to masts and towers. However, consideration should be given to the application of an appropriate age and obsolescence allowance to masts and towers 26m ht and over, particularly in those circumstances where there is a proliferation of mobile operators on site and the full height of the structure is not used.

6.3 Sharer Valuation

A Sharer is only deemed to be in occupation of their equipment accommodation and therefore only the value of such accommodation and the cable is attributable to the sharer. Therefore the values, as detailed at 6.2.4 above for equipment accommodation, should be adopted.

Where the Sharer has occupation of cable only then an NAV of **£100** should be adopted.

NB: This value is not added to the entry for the host but is added to the entry for the Sharer.

6.4 Streetworks

6.4.1 Note that the following values are quoted to **NAV** and include site value, the cost of P&M and the existence of one broadcasting occupier.

Installation Type	Mast Type	Mast Height	(NAV)
Streetworks	Lamp Post/ Lightweight Monopole	All	**£4,300**
	Heavy Duty Monopole	All	**£6,500**

It is anticipated that the heavier duty poles may be capable of sharing. If instances are established, please refer to 6.2.5. In circumstances where transmitting equipment is used by more than one operator as described in 3.1.3, then no payaway addition is to be made.

7.0 Decapitalisation Rate

7.1 Where required, an appropriate decapitalisation rate should be applied.

8.0 End Allowance

8.1 It is not anticipated that any mast installation will require the application of any end allowance.

Mobile telephony masts could not be considered to be a *unum quid*. Therefore, any application of quantum allowance in respect of the number of masts in any single occupation is inappropriate. Any quantum or economy of scale inherent in the rental or cost elements of a single mast are reflected in

the levels of value at section 6.0 above.

9.0 Cumulo Entry and Rounding

9.1 Cumulo Entry

At 2.3 above, it is explained that the Regulations are to be interpreted in such a way that any entries arising from this Practice Note may be included in a cumulo entry in the appropriate valuation roll.

Note that any buildings, over and above those sited at transmission sites, used to host equipment associated with a mobile telecoms network should be valued in their own right at the level of value appropriate to that class of building in the particular location. The value cannot be assumed to be reflected in any network value.

9.2 Rounding

Rounding within the cumulo valuation should take place only at the cumulo level; it is not necessary to round individual items or installations within that overall calculation.

APPENDIX A Photographs of Installation Types and Equipment

Streetworks

The photograph below shows newly installed streetworks pole with shroud removed. It is clear that there is space for 2 banks of antennae

<u>Greenfield Mast that might be confused with Streetworks</u>:

These examples are very close to the edge of the highway but both are within the curtilage of other premises.

Rooftop Sites

Stub Tower

Attached to building

The following are also to be treated as “Rooftop”

Attached to Floodlight pylon

Attached to grain silo

Greenfield Monopoles

Greenfield Towers

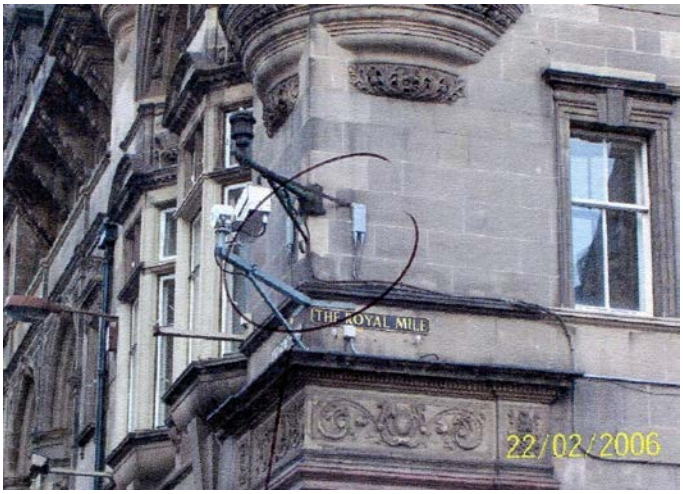
Stayed Masts

Main TV broadcast Mast (305m)

Local Area Broadcast Mast

Guyed Radiator Masts

Pico Cells



Microcell ancillary equipment within building

Ancillary Equipment

Microwave Dish Antennae

Cabins and Cabinets

Ancillary Equipment

Power Supply with Cabinets behind

Appendix B

Non-Domestic Rating (Telecommunications and Canals) (Scotland) Order 1995/239

2. Telecommunications subjects

Any lands and heritages in Scotland which would (apart from this Order) be treated as justifying separate entries in the valuation roll shall be treated as justifying only one such entry if they are-

(a) within a single new local government area;

(b) occupied by or, if unoccupied, owned by the same person; and

(c) occupied by posts, wires, fibres, cables, ducts, telephone kiosks, towers, masts, switching equipment, other equipment, or by servitudes or wayleaves (being property used for the monitoring, processing or transmission of communications or other signals for the provision of electronic communications services).

Paragraph (c) was amended by the Non-Domestic Rating (Telecommunications and Canals) (Scotland) Amendment Order 2006/557 art.2(2)

The Non-Domestic Rating (Valuation of Utilities) (Scotland) Order 2005/127*

7A.—Fixed Line Telecommunications

(1) Any lands and heritages which would (apart from this Order) be treated as justifying separate entries in two or more valuation rolls shall be treated for all purposes of the Valuation Acts as justifying only one entry in the valuation roll for Renfrewshire in respect of each fixed line operator if they are—

(a) occupied by that fixed line operator; and

(b) occupied by posts, wires, fibres, cables and ducts, telephone kiosks, towers, masts, switching equipment or other equipment, or by servitudes or wayleaves, being property used by that fixed line operator wholly or mainly for the purposes of monitoring, processing or transmission of communications signals for the provision of telecommunications services.

(2) A “fixed line operator” for the purposes of this article, is any of the companies registered at the date of this Order with the following names and registration numbers:

Please refer to the current revision of the 2005 Order for the full list of telecommunications companies falling within its terms.

* as amended

Appendix C

Worked Example A – Shared Greenfield Mast

Vodafone lease a site of 25m^2 and erect an 18m high tower Greenfield telecommunications installation with a GRP cabin.

There are 3 sharers on site:

(1) EE Ltd is a sharer with a GRP cabin

(2) H3G is a sharer with a cabinet

(3) O2 is a sharer and uses the installation as a Base Station Controller with cabinets

Host Valuation – (Vodafone) - to be added to appropriate Vodafone cumulo entry:

Site Value NAV:		£5,000
All Rateable Items:		£3,000
Sharer Addition:	Payaway sharer (1) (EE Ltd)	£2900
	Payaway sharer (2) (H3G)	£2900
	Payaway sharer (3) (O2)	£9400
Total NAV:		**£23,200**

Sharer 1 (EE Ltd) Valuation – to be added to appropriate EE Ltd cumulo entry

NAV of installation: **£600**

Sharer 2 (H3G) Valuation - to be added to appropriate H3G cumulo entry

NAV of installation: **£600**

Sharer 3 (O2) Valuation - to be added to appropriate O2 cumulo entry

NAV of installation: **£600**

Worked Example B – Shared Rooftop Site

- EE Ltd lease a rooftop site and erect a 5m high telecommunications installation with a cabin and use the site as a Base Station Controller.

There are 2 sharers on site:

(1) Vodafone is a sharer with a cabin
(2) H3G is a sharer with a cabinet

Host Valuation – EE Ltd - to be added to appropriate EE Ltd cumulo entry

Site Value NAV:		£15,000
Rateable Items NAV:		£2,300
Equipment Accommodation (EE Ltd) NAV:		£INC
Sharer Addition:		
	Payaway sharer (1) (Vodafone)	£4,800
	Payaway sharer (2) (H3G)	4,800
Total NAV:		**£26,900**

NB: Use by host as a Base Station Controller is reflected in the site value.

Sharer 1 (Vodafone) Valuation - to be added to appropriate Vodafone cumulo entry

NAV of installation: **£600**

Sharer 2 (H3G) Valuation - to be added to appropriate H3G cumulo entry

NAV of installation: **£600**

Example C – Large, multiuser Greenfield Mast

Arqiva lease a site of 85m² and erect a 45m high heavy duty tower Greenfield telecommunications installation with a brick building of 25m². Arqiva does not broadcast but has a building hosting equipment used by the Taxi firm.

There are 5 sharers on site:

(1) EE Ltd is a sharer with a GRP cabin

(2) H3G is a sharer with a cabinet and is the first sharer on site

(3) O2 is a sharer and use the installation as a Base Station Controller with cabinets

(4) Vodafone is a sharer with a 18m² brick building

(5) A2B Taxis is a sharer with cable only

Host Valuation – Arqiva to be added to appropriate cumulo entry

Site Value NAV:		£7,400
Rateable Items:		
(A) 45m x £7,085/m = £318,825 @ 4.6% =		£14,666
(B) Site Works NAV		£345
(C) Power Supply NAV		£645
Equipment Accommodation NAV:	Cost Guide valuation (inc any A/O)	£1,250
Sharer Addition:		
	Payaway sharer (1) (T-Mobile)	£2,900
	Payaway sharer (2) (H3G)	No Addition
	Payaway sharer (3) (Orange)	£9,400
	Payaway sharer (4) (Vodafone)	£2,900
	Payaway sharer (5) (Taxi firm)	Nil
Total NAV:		**£39,506**

Sharer (1) Valuation - to be added to appropriate EE Ltd cumulo entry

NAV of installation: **£600**

Sharer (2) Valuation - to be added to appropriate H3G cumulo entry

NAV of installation: **£600**

Sharer (3) Valuation - to be added to appropriate O2 cumulo entry

NAV of installation: **£600**

Sharer (4) Valuation - to be added to appropriate Vodafone cumulo entry

NAV of installation: 18m² based on Cost Guide valuation = **£900**

Sharer (5) Valuation - to be entered separately in Valuation Roll

NAV of installation: **£100**

Appendix D

Glossary of Terms

Base Station:

A base station is a fixed communications location and is part of a network's wireless telephone system. It relays information to and from a transmitting/receiving unit, such as a mobile phone. Often referred to as a cell site, a base station allows mobile phones to work within a local area, as long as it is linked to a mobile or wireless service provider.

A base station is normally positioned in a location far above the grounded area providing coverage. Different types of base stations are set up according to the coverage needed, as follows:

> Macrocells: are base stations covering a service provider's largest areas and are usually situated in rural areas and highways.
>
> Microcells: are low-power base stations covering areas where a mobile network requires additional coverage to maintain quality of service to subscribers. They usually are situated in suburban and urban areas.
>
> Picocells: are smaller base stations providing more localised coverage in areas with many users where network quality is poor. Picocells are usually placed inside buildings.

One service provider may have several base stations positioned to cover specific areas. Ideally, bandwidth requirements serve as a guideline regarding base stations location and relative distance. In most cases, 800 MHz base stations have a greater point-to-point distance than 1900 MHz stations. The number of base stations depends on population density and any geographic irregularities interfering with the transmittal of information, such as buildings and mountain ranges.

The base station is essential for mobile phones to work correctly and optimally. If there are not enough base stations in an area with too many network subscribers or geographic interferences, quality of service is greatly affected. In these cases, base stations are located in areas of closer proximity to subscribers. (Source – Techopedia)

Base Station Controller:

A base station controller (BSC) is a critical mobile network component that controls one or more base transceiver stations (BTS), also known as base stations or cell sites. Key BSC functions include radio network management (such as radio frequency control), BTS handover management and call setup.

A BSC works with a mobile switching centre (MSC) component that is external to the BTS, enabling it to provide full mobile telephony and fulfil capacity requirements. Base stations must communicate with the MSC and data must be managed as information overflow, impacting MSC efficiency. A BSC eliminates MSC base station activity management requirements, allowing the MSC to handle critical tasks, such as traffic balancing and database management.

Often perceived as the intelligence behind the BTS, the BSC serves as a mediator between base stations and the MSCs, while providing voice pathways for mobile phones and other compatible devices, such as a land line or the Internet.

In most instances, several connected base stations and MSCs link to one BSC, which handles network traffic measurement, authentication and handover management. For

example, when a serving BTS does not receive sufficient signalling power from a mobile phone, the BSC will hand over the signal to another cell site to ensure optimal transmission power for the mobile user(s). (Source – Techopedia)

Code Powers:

The rights granted to operators under Schedule 2 to the Telecommunications Act 1984 as amended by the Communications Act 2003. Amongst other rights this, in conjunction with the New Roads and Street Works Act 1991 or the Roads Scotland Act 1984, allows the operator to locate equipment on the pavement or the side of roadways without payment of rent.

Mast:

This is, normally, a ground-based structure that supports antennae/dishes at a height where they can satisfactorily send and receive radio waves. A very limited number of such masts are installed on rooftops and can be distinguished from Stub Towers that are much more common.

A typical mast, used in mobile telephony, is 15m – 18m high, but can be taller, and is of steel lattice or tubular steel construction. Newer, slimmer versions of masts are now available which can be painted to blend in with their surroundings, disguised as trees or used in conjunction with street lighting and CCTV cameras. Masts themselves, in mobile telephony, play no part in the transmission of the radio waves and are merely a support structure.

Payaway:

This is the term for any additional rent passed on to the owner of the site by the host or main operator in respect of allowing site sharers onto the mast. In general the amount is a percentage of the site share fee and usually is around 25% to 30% of the fee paid. The actual percentage is defined by the Ground Lease in those cases where agreement on such payment has been made.

In the limited number of Rate Cards or Site Sharing Agreements made available, there is clear evidence that a “Superior Landlord Recharge” is included as a condition of the Sharer’s occupation agreement. This condition and “blending across the estate” requires the sharer to reimburse the Mast Host by the amount of the payaway – whether or not a payaway is actually passed to the landlord and will be payable even where there is no Superior Landlord.

Note that the existence of a payaway is far from universal.

Stub Mast:

This is a roof-mounted mast structure which supports antennas at a height where it can satisfactorily send and receive radio waves. A stub mast is typically 4m - 6m high and of tubular steel or steel lattice construction. Stub masts themselves play no part in the transmission of radio waves.