



Lessons from the Telecoms Boom

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- Arqiva owns and operates the terrestrial radio and television broadcast networks – about 1,750 masts and towers
- Arqiva also owns in excess of 1,500 T-Mobile tower sites under a sale and leaseback type agreement
- Arqiva also has agreements with other owners of towers and high buildings such as BT exchanges, hotels, fire authority towers etc. under which we manage site sharing typically by mobile operators
- I am the Arqiva National Town Planning Manager, with responsibility for our town planning functions across the UK and Channel Islands
- I have specialised in town planning and electronic communications since 1986

The Telecoms Boom

When did it start?

- The Telecommunications Act 1984
 - The birth of modern electronic communications
 - BT privatised from Post Office
 - Two **First Generation** licences issued for mobile telephony to Vodafone and Cellnet (now O2)
 - At this point probably no more than around 1,500 radio mast sites used mainly for broadcast purposes

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What happened next?:

- Launch of First Generation mobile networks
 - In 1986
 - Both operators required around 1,000 sites
 - Network deployment divided roughly between:
 - The use of existing masts
 - The use of other high structures
 - The development of new masts
 - The latter ranged typically between 15 and 45 metres in height and would have numbered around 700 new radio mast sites

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And then:

- In 1991 the Government issued three new **Second Generation** licences and granted rights to Vodafone and Cellnet:
 - Two licensees merged
 - Two new services launched by One 2 One (now T-Mobile) and Orange
- In 2001 the Government granted rights for the four existing operators to develop **Third Generation** services and also licensed a new operator “3”
 - First Third Generation services launched in 2003
- Across this period other systems and licences came and went. The only significant one relating to the Tetra service operated by Airwave for the emergency services.

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Where are we now:

- In 2010, around 50,000 mobile base stations – this does not include some very small sites and in – building installations, e.g. within shopping centres and airport terminals
- But taking into account sharing and the use of other high structures this equates to about 21,000 ground based masts
- The typical height for Second and Third Generation networks was 15 metres
- At the peak of network deployment in the Noughties, new masts were being permitted at a rate of about 2,000 per annum

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So How did it Feel?

The Telecoms Boom from a Local Authority Perspective



And the Neighbours

- Location - It's near me
- Appearance - It's hideous
- Safety - It's going to Kill me

And the press reaction

site at Fountain Road in Cookstown

Mast on the move?

Gillian McDade reports



NO MAST HERE... Residents of Fountain Road and Rocheville who protested at Cookstown District Council Offices last Thursday mms14-166

A MOBILE phone company has agreed to look at alternative sites for a controversial telecommunications mast in Cookstown, following a meeting with residents.

The residents, from Fountain Road and Rocheville, said they are adamant that plans to erect a One 2 One mast near their homes will not go ahead.

The residents met with local councillors and representatives from One 2 One

forward.

A spokesperson for Crown Castle UK, the company responsible for the One 2 One network in the UK, said no work would commence without discussing the matter with the residents.

"We agreed we would not proceed without consultation with the residents. At the minute we are in contact with Cllr Trevor Wilson looking at alternative sites for the mast," she said.

CONSULTATION

Cllr Trevor Wilson said Thursday presented the opportunity for Crown Castle UK to hear at first hand the views of the residents in the area.

PROTEST... Residents say no to the proposed One 2 One mobile phone mast. mms14-167

SPR TO MAKE

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You can't keep a good story down

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Home Contact Us Campaigns About Us Offers Football Results

EDITION: Sunday, 18th Dec 2004
3 DAYS 12 HRS 1 MIN

NEWS

NEWS OF THE WORLD INVESTIGATES: Cancer fears over phone masts

KILLER ON THE ROOF

By Tim Rowell

SIX neighbours from the same floor of a block of flats have all been hit by cancer after two phone masts were installed on the building now dubbed The Tower of Doom.

Two people died after the disease struck in six out of just eight homes on the top storey.

Tenant Mike Cole, 70, said: "It's like living on Death Row. You're constantly worrying who's going to be next."



NEWS OF THE WORLD READERS' POLL
Do phone masts pose a health risk?

Yes	63%
No	23%
Don't know	14%

And 63-year-old John Llewellyn, from No 48, is battling bowel cancer.

[CLICK HERE TO FIND OUT WHERE YOUR LOCAL MASTS ARE](#)

Other residents, such as Doreen Sheppard, 73, from No 45, have complained of headaches and other health problems.

Doreen told the *News of the World*: "I get terrible headaches, and I've started suffering Meniere's disease, where I lose my balance.

"I blame it on the masts. They're right on top of our homes."

The impact of the Internet boom!

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Petition the Prime Minister ...to acknowledge the many peer reviewed studies that show adverse health effects from exposure to microwave radiation.

<http://petitions.pm.gov.uk/PhoneMasts>

Mast-Victims.org

Raising awareness of the harmful effects of cellphone masts

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The Similarities – Visual Impact

Vertical Infrastructure generally in the countryside, often in designated areas, with potential for visual impact

- Encouraged by Government - with associated targets
- Yet at the same time this must be balanced with environmental protection
- Wind industry better than electronic communications industry at addressing potential visual impact
- Flag waves/balloon flying versus good quality photo montage made possible through digital photography

The Similarities – more than just visual impact

- The telecommunications industry has been greatly impacted by concerns relating to Health and Safety – a source of considerable objection and also changes to the legislative and policy framework
- Wind turbines – seem bedevilled by a range of issues that feed into the planning process, e.g.:
 - Affect on radar
 - Bats and birds
 - Noise
 - Epileptic fits
 - Etc.
- **But there is no magic bullet to be found in the handling of individual applications**
- **And the economics are very different as compared to a mobile phone mast.**

General Points

- Use the right consultants
- Prior consultation vital to pre – empt the rumour mill
- Planning applications must be thorough and comprehensive – leave no hooks upon which a refusal might be hung
- But documentation must be comprehensible to a lay person – technical information should be placed into appendices
- Anticipate and deal with the common challenges, e.g.:
 - it will take twenty years for the turbine to power its own construction
 - it will not even run a normal house etc.
- Avoid technical jargon and think about terminology

Turbine – conjures an industrial scale image



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Blades – have other connotations



45 dB (A) – how loud is that?

- 35 dB (A) is the noise of a very quiet room fan at low speed at 1 metre distance
- 45 dB (A) is the noise of normal living
- 50 dB (A) is a refrigerator at 1 metre distance

The Differences – Permitted development rights

- Key difference is that since 1985 the telecommunications industry has had permitted development rights.
- Since 2001 these have differed between different parts of the UK, but in England Wales PD Rights still exist for the development of radio masts up to 15 metres in height subject to a prior approval process on detailed siting and design.
- PD rights for microgeneration, including small wind turbines, still no more than a proposal in all parts of the UK.
- As a guestimate, about 50% of all ground based masts in UK would have been erected under permitted development rights.
- RenewableUK has a crucial role in persuading each Regional Government to grant PD rights – this will make a substantial difference to the planning logjam experienced by the Industry.
- The role of RenewableUK more important than the Mobile Operators Association.

The differences – Planning Policy

- National planning policy has since 1985 been dominated in the UK by the actions and requirements of the mobile telecoms industry
- There have been shortcomings, but at least it has been targeted to the mainstream of development activity
- Planning policy on Renewable Energy is not where it should be
 - It makes no proper distinction between wind turbines for microgeneration and much larger turbines
 - In so doing it almost perpetuates the step change in perception often held by the public, i.e.
Wind Turbine = Wind Farm
 - It fails also to deal with issues that may either be urban myths or at best might only be relevant to very large turbines. Bats is probably an example of this.

The Differences – Planning Policy

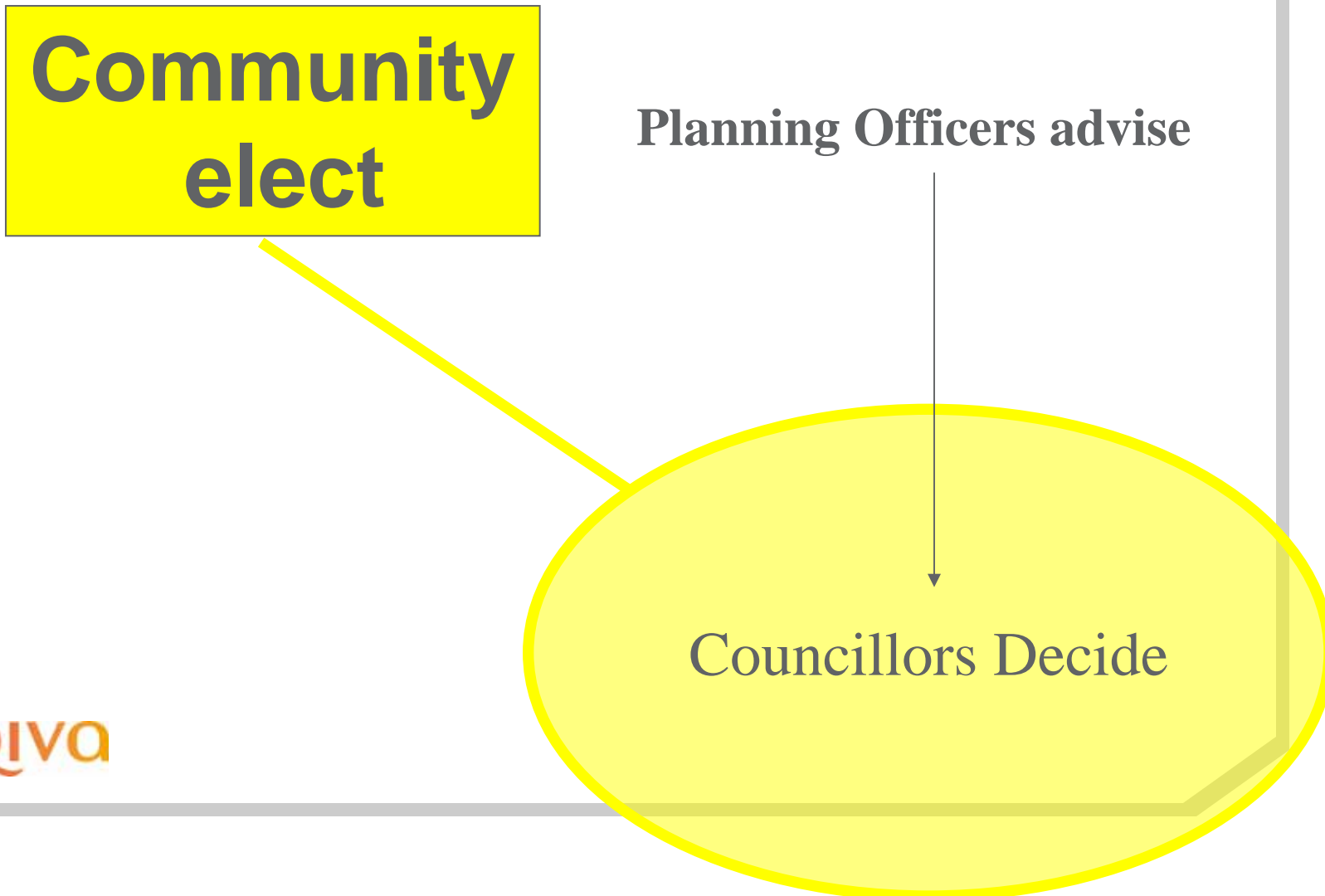
Again RenewableUK has a major role to play.

Engage directly with Government, e.g.

- The Planning and Electronic Communications Working Group
 - Industry representatives
 - LPA representatives
 - Government representatives, i.e. from the Communities Department, OFCOM, Business Innovation & Skills and Health
 - Stakeholders from main objector groups
 - Used principally by Government as a means of evolving policy and best practice and advice to public on the Planning Portal.

The Role of Community engagement

Remember:



The Role of Community Engagement

And:

**Community
elect**

Civil Servants Advise

MPs Decide

Influencing the right people at local level

At local level:

- Don't focus on the technical
- Don't focus on Government/international targets
- You have to make the benefits relevant to them
- You have perhaps to also make the disadvantages of the alternatives relevant to them
- And probably their children and grandchildren
 - Many local members are retired
 - Young people more likely to be in favour of wind turbines
- Don't under – estimate them or their motives

Influencing at Government Level

Renewable energy has an open door with every party

But civil servants are busy people and are driven by Ministers on the issues of the day

You must help them by:

- Drafting policy and best practice
- But in a way that shows balance and objectivity
- And deals effectively with the issues

Again RenewableUK has a major role to play

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- Thank you