Virgin Media's response to Joint Regulators Group's call for inputs on shared works, shared facilities and revenue sharing

Executive Summary

Virgin Media welcomes the opportunity to respond to the Joint Regulators Group's ("**JRG**") call for inputs on shared works, shared facilities and revenue sharing ("**Call for Inputs**"). As an operator that has invested significant levels of private funds in its own next generation access broadband network infrastructure, Virgin Media is acutely aware of the material financial outlay required by such a deployment. We therefore support any exercise in exploring measures by which this outlay can be reduced and believe that significant opportunities do exist.

In advancing such measures however, it is vital that policy makers and regulators ensure that, in addition to encouraging future investments in infrastructure, existing investments remain sustainable and that any new measures complement networks already in place.

We believe therefore that the greatest benefit can be obtained by **prioritising the resolution of obvious inefficiencies and inhibitors in legislative and procedural arrangements (such as inequitable planning regimes and lack of certainty in wayleave/right of way arrangements)**, **together with a focus on addressing the enduring disincentive to network expansion caused by ratings regimes**.

In our view it would be counter productive for the UK regulators to pursue a highly interventionist strategy which would place undue burdens on infrastructure owners. In this respect, while we believe that the sharing of physical access to works and facilities across different sectors has the potential to deliver benefits, we consider that the principal role of regulators should be in **facilitating and encouraging commercial arrangements between parties in different sectors**. This is in contrast to the mandating of physical access to facilities which, given the likelihood of wider, counter-productive consequences, is, in our view, a power that should be exercised on an exceptional basis and as a last resort. In the communications sector, if there is a genuine market failure or competition issue in this regard, regulators have at their disposal an established set of tools in the form of the significant market power ("**SMP**") framework. Mandatory physical access in relation to telecoms facilities in situations where there is no SMP would be a disproportionate measure.

In addition, whilst we understand the need for information to be provided to access seekers as part of individual negotiations in relation to specific projects, we believe that it would be **wholly disproportionate of regulators to utilise their powers to require infrastructure owners to carry out a systematic mapping exercise** to catalogue existing infrastructure on a national basis. Not only would such a requirement pose a substantial burden on infrastructure owners, we also have serious concerns about the overall security and confidentiality of the data provided. The scale of such a task should not be underestimated and, in our view, a register of that nature is unnecessary to encourage cross-sector co-ordination of works and sharing of facilities.

While we recognise that the current focus of the Call for Inputs is shared works, shared facilities and revenue sharing as between different sectors (i.e. inter-sector sharing) - a concept which in principle we support as having the potential to bring about significant benefits - we would however take this opportunity to voice our deep concerns regarding any possible mandatory requirement to share infrastructure

between members of the same industry (i.e. intra-sector sharing), above and beyond that which is provided for by any SMP framework. To do so, would inevitably raise a host of issues including, but not limited to, the burden/disruption that it would represent to affected operators' businesses, concerns around the information sharing and distortion of investment incentives. Such a requirement would have a negative impact on both incentives for future investment in infrastructure and investment made in infrastructure to date.

Key measures to be taken

In the Government's 2011 National Infrastructure Plan, it was recognised that the UK's infrastructure "*is a system of increasingly interdependent networks. A silo-based approach to national infrastructure planning will miss the opportunities and threats created by these increasing systemic linkages*."[1]

"*As infrastructure networks become more complex, these interdependencies are likely to increase substantially. Infrastructure systems are evolving and in some cases converging. Large scale infrastructure assets are increasingly relying on flows of information and other communication technologies. For instance, the electricity network is moving towards smart meters, active traffic management systems using real-time information are increasingly common, and water companies now use remote sensors to identify leaks*"[2]

In this regard, Virgin Media considers that there are a number of facilitating, non-interventionist measures that could be implemented by policy makers and regulators in order to increase the interest of other utility companies in providing access to existing infrastructure and therefore steer away from the "silo-based" approach as noted by the Government.

- First, it is necessary to ensure that the prevailing regulatory regime in the sector in question does not disincentivise, or worse still, prohibit the sharing of infrastructure. For example, where a utility company is subject to a regulated rate of return, it should not be unduly penalised for receiving additional revenues from the renting of its infrastructure to telecoms providers. Furthermore, we believe that the prospect of affording infrastructure owners explicit incentives should be explored, while refraining from the provision of state aid.

- Second, the broader administrative and legislative environment must be conducive to such sharing. Planning laws, wayleave and rights of way arrangements and rating regimes should be reviewed and where necessary reformed so that they do not frustrate attempts to make additional use of infrastructures (see further below).

- Third, policy makers and regulators should facilitate and encourage the realisation of wider, mutual benefits. That is, beyond the incentive of increasing revenues, infrastructure owners should be able to leverage collaborative working with telecoms operators - for example to advance smart network initiatives for energy, transport etc. In cases such as smart metering which will inevitably involve the close-cooperation of both energy providers and communication service providers it would be beneficial for the underlying

[1] HMG's 2011 National Infrastructure Plan, paragraphs 4.1.

[2] Ibid, paragraph 4.5. This was reiterated in paragraph 4.1 of HMG's National Infrastructure Plan Update 2012.

regulation to ease the process to the greatest extent so that the mutual efficiencies of infrastructure sharing can be realised.

- Fourth, regulators should consider how best to encourage public consultation and engagement at an early stage of any shared project. While it is essential for there to be cooperation between the parties involved, such collaboration can, in our experience, have even greater effect if it incorporates end users in addition to infrastructure owners and those wishing to share. For example, Virgin Media's trial in Crumlin included a program of engagement with prospective customers, via which the project was clearly explained to them and the benefits of it demonstrated. As a result, the local community was less resistant to the deployment of overhead infrastructure than they might otherwise have been. Public engagement from the outset would also enable those seeking to share to gauge the level of demand for the services which they are seeking to provide which in turn may provide greater commercial impetus for the project.

Examples of cross-sector co-ordination

As part of the Call for Inputs, the JRG has requested respondents to provide examples of cross-sector co-ordination from which lessons can be learnt.

In the last 3 years, Virgin Media has undertaken two projects which were designed to test whether or not high-speed broadband could be delivered by alternative means to underground cabling using new or existing infrastructure.

- ***Delivery of Services via new Overhead Facilities*** - During 2010, Virgin Media tested the delivery of its services via overhead facilities. Following the erection of a number of telegraph poles, Virgin Media was able to deliver high-speed broadband and television services to residents in the village of Woolhampton, Berkshire. This installation entailed the connection of the Virgin Media core network, which passed close to the village, to a central distribution point, via a small amount of underground civil work. From this point, fibre optic cables were distributed to premises via overhead facilities at the local level.

- ***Delivery of Services via Electricity Infrastructure*** - During 2010/2011, Virgin Media undertook a similar small project involving the delivery of high speed broadband and television services over electricity infrastructure. Following agreement with the power distribution company, a number of homes in the village of Crumlin, south Wales, were connected directly to Virgin Media's Cable network using that company's poles and pylons. Fibre optic cables were deployed across 'backbone' electricity pylons, establishing a connection between the village in question and the Virgin Media core network some miles away. From a central distribution point, fibre optic cables were then connected to individual premises via existing local electricity poles.

Both projects, albeit limited in scale and scope, demonstrated the potential benefits that could be generated by cross-sectoral co-ordination - in particular the cost savings that could be achieved as a result of the less intensive civil works and the reduced time to market. However, the trial projects ultimately highlighted the restrictions and constraints incumbent in the current administrative and regulatory regimes – in particular those relating to planning laws, rights of way etc. (see further below).

Current barriers to sharing and coordination of facilities

As set out above, there are, in Virgin Media's view, a range of bottlenecks which operators are confronted with when attempting to share or otherwise coordinate their facilities – the magnitude and nature of these can vary according to the type of infrastructure.

(i) Administrative and legislative limitations

In Virgin Media's experience, the principal barriers to sharing existing infrastructure have been manifest in administrative and legislative issues. As our test projects have proven, significant challenges were posed in overcoming the issues surrounding securing permits, rights of way, wayleaves and planning legislation.

It is difficult to ascribe a particular cost incurred or period of time needed for a company to obtain all necessary permissions or to ensure compliance with the various pieces of legislation, however, in Virgin Media's experience, both can be substantial. It also requires significant coordination between the different industry participants involved to secure all necessary consents etc. and understand the confusing and at times conflicting regimes.

Simplification and streamlining of these often antiquated regimes such that they positively promote sharing of works and facilities would, in our view, be some of the most positive steps that could be taken by the policy makers and regulators. We set out our views in relation to each of the key areas below which are in need of such reform:

(a) Permits, Consents etc

In the UK, where operators intend to undertake street works, they are required to obtain a number of permits/permissions, submit notices and adhere to certain regulatory requirements. While a certain level of control and diligence is of course necessary, we consider that there is significant scope for the processes and procedures to be streamlined. The complexity of the consents landscape can lead to an inconsistent and rigid regime that relies on different legal bases, has many elements, and involves various agencies in the application and decision-making process. Navigating through the various levels of bureaucracy creates uncertainty and delay in the overall development process. There is a lack of co-ordination between the different parties involved and in some instances the requirements and legislation are conflicting or ambiguous. For example, there are a number of instances in which works that are regarded as *de minimis* under one set of legislation (and thus do not require notification), require a permit under another.

There are also certain aspects of the existing legislation that are disproportionate or unduly burdensome. For example, in certain instances small, non-traffic sensitive works still require full approval and the obtaining of permits. Similarly, the exercise of discretionary aspects of legislation that allow for reduced obligations in cases of non-disruptive activity is inconsistent. This can have significant cost and timing implications for operators as, for example, permit costs are incurred when those permits are arguably unnecessary.

We would also observe that it is important to ensure that the applicable permit and consent regimes operate on a cost recovery basis rather than, at the extreme, being used as revenue generation mechanisms.

We welcome the Government applying scrutiny to the consents process and await with interest the consultation on the Growth and Infrastructure Bill which is currently before Parliament. Virgin Media will continue to input its view and ideas, where possible, so as to bring about as timely a resolution as possible to the current challenges posed and improve coordination and communication between different consenting bodies to make the overall consents process more efficient.

(b) Wayleaves and Rights of Way

The securing of wayleaves and rights of way invariably involves a considerable amount of time and can be costly. For example, there have been many situations in which landowners have held telecoms operators to ransom, as the lack of alternative options affords them a position of negotiating strength.

In the UK, the relevant legislation governing the relationships between land owners and those parties wishing to deploy networks is contained with the Electronic Communications Code ("**the Code**"). The Code is, in Virgin Media's view, unfit for purpose. In particular, it contains a number of inconsistencies and does not provide a sufficient framework for the establishment (and agreement) of arrangements between land owners and network operators. This can lead to elongated timeframes, the imposition of disproportionate charges by land owners and, ultimately, disputes – all of which frustrate significantly efforts to deploy high speed infrastructure. We note that the Code is currently undergoing review, and we welcome, and are contributing to, this activity. We hope that it will result in the necessary amendments being applied.

Similar frustrations may be felt in relevant legislation governing other industries / utilities.

(c) Planning Laws, Building Regulations etc

There are a number of aspects of planning law that frustrate the deployment of certain infrastructure. These shortcomings are particularly acute in the case of the deployment of overhead infrastructure. While we of course recognise the need to have regard to factors and safeguards specific to this type of installation, and the need to take account, for example, of visual amenity considerations, the legislation in its current form is in many cases unnecessarily prohibitive. A more proportionate approach to overhead deployment could enable greater use to be made of both new and existing infrastructures, delivering efficiencies and cost savings and, ultimately, resulting in benefits for end users.

We welcome the scrutiny currently being applied by the Government to the UK planning regime and hope that the proposed changes to remove or minimise the level of red tape brings about a more efficient system overall. In order to facilitate cross-sector infrastructure sharing, however, it will be necessary for any changes made to apply consistently and coherently across all industries so as not to frustrate any future projects. This will necessitate all regulators to work together with Government to ensure that all concerns are raised at an early stage.

(d) Civil works

In the UK, there are a number of potential sources of information relating to planned civil engineering works, although in our experience there is in general no centrally held register and any collated information that does exist is typically held at a local level. Moreover, the information is not necessarily readily available and there are

invariably inconsistencies in the approach to compiling, and the format of, any data held. In the public domain, the construction press provides leads and insight relating to planned works; however this is a far from comprehensive source of information and may not always be accurate.

The key opportunity rests, in our view, in the Planning Consent process, which requires any organisation intending to undertake civil works to make an application to the local planning authority. Collating and combining this information into a central registry could deliver significant benefits – particularly if its scope was sufficiently broad to cover different types of work (e.g. utility, public and private sector) and different types of infrastructure. We would suggest that a register akin to the Scottish Road Works Register would be beneficial for the whole of the UK. In Scotland, organisations intending to undertake civil works are required to submit those plans to a central register, using a single, consistent mapping system. This allows for ease of reference and access.

Clearly there would need to be certain controls around the availability of and access to the information so as to protect commercially sensitive information and uphold national security, but we consider that such an approach could facilitate the coordination of works and potentially introduce cross sector efficiency (via, for example, the sharing of costs and aggregation of planning/wayleave applications).

We would, however, draw a distinction between the type of civil works registry described above and an 'asset register' type inventory of infrastructure. In the case of the former, we envisage a register of planned works (i.e. effectively a calendar of anticipated civil engineering tasks, including the location and a general, high level description of the tasks involved, which would facilitate the coordination/combining of activity which might otherwise have been undertaken independently). This is in contrast to an inventory of infrastructure which, as we have set out elsewhere in our response, is a different prospect altogether.

(ii) Physical and practical limitations on sharing existing infrastructure

In Virgin Media's experience, there have also been a number of physical and practical barriers to sharing existing infrastructure which have proven difficult to overcome.

Considering telecoms infrastructure specifically, it will in our view very often be the case that existing facilities simply not capable of providing access to a third party. Many operators have deployed those facilities to a particular specification which invariably will not have anticipated sharing. Moreover, given the consolidation that has taken place within the sector, many operators have acquired physical assets that were similarly built to serve a single operator, are damaged or are otherwise unable to accommodate additional networks without significant reengineering. In these circumstances it is likely that additional infrastructure will in any event need to be deployed at significant cost.

It is with this in mind, that we highlight the impediment to further network / infrastructure deployment that can be caused by the existing ratings regimes. The rates bill to which operators are subject can represent a significant and disproportionate financial burden which, ultimately, reduces the funds available for network expansion. Furthermore, uncertainty about how the rateable value of networks will be assessed in future equally constitutes a disincentive to further build out.

In the case of challenges inherent in the sharing of non-telecoms infrastructure, similar issues may exist. For example the ducts of electricity companies may be subject to similar types of constraint as those relating to telecoms companies and the challenges in sharing water or sewage infrastructure are self-evident. It may however, be the case that certain utility infrastructure is better suited to sharing given larger conduit sizes, greater levels of accessibility etc.

Commercial rather than mandated access

As a general principle (and aside from genuine cases of market failure or competitive harm), we believe that it is important that owners of infrastructure should be free to decide, on a commercial basis, whether physical access should be made available to third parties. This is not to say that the coordination of works and sharing of facilities should not be incentivised or facilitated – for example by ensuring that the regulatory regimes of other sectors are receptive to, and do not discourage such practice – but infrastructure owners should not be compelled to grant physical access.

Not only would mandatory sharing of infrastructure represent an undue burden, but it would also likely result in an appreciable amount of disputes and litigation as many infrastructure owners are likely to be resistant to an imposed obligation. It would therefore be, in practice, a disproportionate intervention, with the disadvantages outweighing any benefits. Inevitably this would result in resources (both management time and money) being diverted away from further infrastructure being developed and delay any possible benefits being generated – both of which are contrary to the intended rationale of the infrastructure sharing proposals.

In the context of the telecoms sector specifically, where a genuine competition problem or market failure exists, regulators have at their disposal a suite of tools under the established SMP framework. In such circumstances, ex-ante access obligations can be imposed to address the issues. This is a well-proven and accepted means of addressing the shortcomings in markets and in constraining dominant providers' ability to act to the detriment of customers and competitors. Moreover, operators in the market recognise and acknowledge this framework and take full account of it in the development and operation of their businesses.

This is in contrast, however, to the exercise of powers available to regulators to mandate physical access/sharing of locations/sites in circumstances where there has been no finding of SMP. This measure is, in our view, highly interventionist and should be exercised only in the most exceptional circumstances. The mandating of access to facilities/sites/locations of an operator that has not been found to be dominant brings with it a very strong likelihood of disruption to that operator's business model and functioning. It will invariably be required to undertake significant and unanticipated developments to its mode of operation and constitution and could quite conceivably be forced to divert resources from other initiatives – including its own roll out of high speed networks.

Perhaps more critically, any physical sharing requirement imposed by the regulator in these circumstances could not only jeopardise the future plans of the operator in question, but would present a very real risk of its existing investments being undermined.

In this regard, we support and take comfort from the Government's most recent statement that it supports "*potential **commercial** initiatives involving infrastructure providers, including Network Rail, which could facilitate the sharing of existing mobile*

communications infrastructure with UK Mobile Network Operators" (emphasis added)[3]

No national infrastructure catalogue requirement

Systematic infrastructure mapping and consistent inventory compilation may, from a simplistic perspective, appear to be a potential facilitator of the sharing of facilities. Indeed, a catalogue of infrastructure could provide an easier identification of potential sharing opportunities and could enable refinement of network deployment plans on a more expedient basis. However, we believe that the matter is not that straightforward and, as we explain below, there is in all likelihood a significant risk of the benefits being outweighed by other consequences. For this reason, Virgin Media believes that any consideration by policy makers and regulators of infrastructure mapping and inventory compilation should be approached with caution.

We note for example that regulators have at their disposal powers to require the compilation of inventories of infrastructure. However any consideration of the exercise of those powers must have due regard to the principal of proportionality – regulators must be alert to the substantial burden that such requirements can place on the owners of infrastructure. Moreover, security concerns and commercial confidentiality/competition issues must be duly recognised and taken account of.

The compilation of a detailed national inventory of existing telecommunications infrastructure is likely to be an onerous task for owners of infrastructure and would, we believe, be counter-productive. A full national inventory detailing every duct and piece of infrastructure in the UK would be a disproportionate requirement: rather than stimulating the deployment of future infrastructure projects such as super-fast broadband, it is likely to hinder it, on the basis that the scale of the task and the resources that would need to be dedicated to it would encumber future plans.

An inventory which required operators to report on the exact location of all of their ducts and their status, would require an excessive amount of resource. For example, providing information on the condition and capacity of ducts would require the accessing and exploration of each individual duct. This is an exercise that can only be conducted manually and would, in addition, invariably be subject to a number of accessibility and logistical challenges. Furthermore, in the telecoms sector, given the substantial level of consolidation, many operators have acquired infrastructure for which location or status records are inconsistent or perhaps incomplete.

By way of example, Ofcom has previously commissioned Analysys Mason to undertake two sample surveys of the Openreach infrastructure network in the UK. This, in our view, demonstrated very well the scale and complexity of the mapping task. The first survey involved a sample of the infrastructure between metro nodes and street cabinets, and the second survey assessed the Openreach D-side access infrastructure. While both surveys constituted substantial pieces of work, both encompassed only 0.02% of the Openreach network. If a national register of all infrastructure was therefore required, the costs and time taken would be too great and risk the diversion of resources from the actual deployment of new projects.

We also have serious concerns about security (including theft) and confidentiality. Clearly it would not be in any Member State's interest for detailed inventories of what will in many cases be critical infrastructure to be generally available 'on request'. Even with safeguards in place it would not be appropriate to provide access to such

[3] HMG's National Infrastructure Plan Update – December 2012, paragraph 4.4

an inventory to any third party so requesting. The compilation of what would effectively represent a register of assets also raises the risk of competitors having access to commercially sensitive information and the prospect of speculative or tactical claims for sharing. As set out above, it is possible that the establishment of forward looking inventories of infrastructure may be less onerous – that is, all new deployments of infrastructure could be recorded and detailed on a central register. Such an approach would clearly not be subject to the burdens associated with documenting existing infrastructure, and it may be that newly deployed infrastructure has a far greater ability to support sharing in any event given the practical and physical issues set out above. However we would note that the highlighted security and confidentiality issues would remain.

In Virgin Media's view any consideration of the exercise of a regulator's formal inventory compilation powers should be approached on a case-by-case basis, and only where commercial negotiations between infrastructure owners and those wishing to share have been unsuccessful. For a regulator to undertake such consideration, credible demand for the sharing of facilities/sites/locations in a given area must exist. Those wanting to share facilities/sites/locations must be able to demonstrate that they have a robust, credible and proven business plan to deliver superfast broadband services in the area concerned, including evidence of access to adequate, secured funding to support the plan. Only then should the regulator consider if it is appropriate to exercise the powers, having the utmost regard to the principle of proportionality.

If it decides that the provision of an inventory of infrastructure should be provided, the requesting party must be subject to strict security and confidentiality conditions. We would note in addition that exercise of the inventory compilation power is separate to, and does not imply that it will be appropriate to, mandate access to that infrastructure.

Inter vs Intra sector infrastructure sharing

As noted above, while we recognise that the current focus of the Call for Inputs is the sharing of infrastructure as between different sectors, a concept which in principle we support as having the potential to bring about significant benefits, we would however be deeply concerned about mandatory physical sharing of facilities being imposed within the same industry (i.e. intra-sector sharing), above and beyond that which is provided for by the SMP framework as referred to above.

To do so, would be an extremely draconian measure and inevitably raise a host of issues including, but not limited to, the burden that it would represent and the disruption to affected operators' businesses and investment incentives. In addition, such a measure would necessarily result in the exchange of commercially sensitive information. Significant levels of control would therefore need to be implemented to prevent other industry members effectively carrying out fishing expeditions and mandatory physical sharing should only ever be considered once all commercial avenues have been explored and exhausted.

As noted above, to mandate sharing of physical facilities within an industry would present a very real risk of undermining existing investments. Moreover, given the extremity of the measure and the implications of its application, it is possible that such an imposition would be highly susceptible to legal challenge. These consequences would, in all likelihood, far outweigh any benefits that the sharing of the infrastructure in question might deliver and would accordingly be counter productive to the outcomes sought.

The existing SMP framework should be the principal determinant of any formal requirement to share facilities/sites/locations within the telecoms sector.

Virgin Media
21 December 2012