What is an OPLAN?

An open public local access networks – OPLAN – is precisely what it says it is. That simple proposition scarcely does justice to what this digital infrastructure can achieve, or the scope of the potential economic, social and creative benefit that OPLANs can unleash. Quite simply, they can make all old–style notions of "telecoms" redundant.

OPLANs are springing up in hundreds if not thousands of local settings around the world. OPLANs come in all shapes and sizes – ranging from a cluster of yak farmers in Nepal communicating with each other and the rest of the world using WiFi wireless technology, through to city–wide fibre networks connecting all the homes and other buildings in a major city such as Amsterdam in the Netherlands. There is no hard and fast definition of an OPLAN, and a more extensive briefing note can be found here.

However, there are some distinctive defining characteristics of OPLANs that link them all together, and differentiate them from today's telecommunications networks. OPLANs, to a greater or lesser degree, have the following characteristics:

- is a network of truly 'broadband' capacity – i.e. where the bandwidth capacity is determined by nothing other than the physical characteristics of the deployed technologies (neutral)
- dedicated to serving a local geographic community or location – ranging from a street or business park through to a rural community or an entire city
- provides abundant low cost "open access" to connectivity on an end–to–end and symmetrical basis throughout that community
- is a public utility in that it is available for use (on equal terms) by any party connected to it within the community it serves : public and private; business and residential; service provider and service consumer
- affords global connectivity (inc. to the Internet) through offering open access to competing third party carriers/service providers
- does not differentiate between 'content creators' and 'content consumers' and their *bits*
- provides infrastructure which is open to all and it is owned and controlled independent of any service or content which uses it
- is structured, financially and legally, and configured with management and governance measures and locks which serve the 'common good' and assures that the primary value and benefit rests locally with users connected to it
- end–user periodic 'access charges' are broadly based on servicing the capital and recovering maintenance and upgrade costs over time
- is funded by the private sector and market driven – it is not a back–door to re–nationalization or state control

The communications world that grew up around the telephone was shaped by a business model based upon managing and allocating 'scarcity' – scarcity of network capacity, scarcity of customer equipment and scarcity of central–office switching facilities. But the three seminal technological developments of the latter half of the 20th century have completely turned this world upside down. These developments:

(i) the digital computer
(ii) optical fibre transmission media
(iii) software controlled spread spectrum radio.

It is now a world of abundance. OPLANS are the natural final link in the chain to make this **abundance** freely available to everyone. OPLANs can transform the socio–economic life of all communities in the 21st century and turn the dreams of the information revolutions into reality.