## Pillar III: Support in adoption and implementation enablers to accelerate broadband investments

The normally expected enablers to commercial investments in broadband infrastructure are:

- The removal of the need to obtain licences involving complex procedures and decision making by a regulatory body or ministry. Unless scarce resources are involved (for example if spectrum is already in high usage or numbering ranges could run out) then market entrants should not have to wait for regulatory decisions, they should only have to notify their intention to the regulator and be made aware of the general conditions that apply to the electronic communications market.
- Spectrum resources should be made available to the market for full economic exploitation.
   This should be done in a fully transparent way and not be subject to spectrum hording by the state (or by existing market players) or subject to other market distortions. Spectrum liberalisation measures include technological neutrality, spectrum re-farming and secondary trading.
- Efficient access procedures to rights of way over public and private property. Although
  under the legal framework access might be possible, investors often face burdensome
  administrative barriers when having to negotiate with multiple rights of way granters under
  different procedures, timescales and costs. Regulatory intervention can unify procedures,
  provide assistance and a "one stop shop" approach to reduce the unnecessary complexities
  often faced.
- The implementation of a basic set of competitive and consumer safeguards including number portability and simple wholesale broadband access obligations such as local loop unbundling and wholesale broadband access. Although these are a cost burden in the first instance for operators to establish the necessary enabling common systems, they benefit all market participants by allowing consumers to choose the best available service provider without unnecessary and anti-competitive barriers.

Additional investment enablers for "grey areas" 1

In assessing individual countries, the investment conditions for the "grey areas" are a prime focus because greater investment in these areas will help the network to reach further, giving the added benefit of reducing the eventual cost of reaching the "white areas". In order to facilitate commercial investment into the "grey areas" and stimulate competition, the following regulatory enablers should also be present;

• The building of an infrastructure database that gives all investors transparency regarding the existing and planned infrastructure on a geographical basis. The main infrastructure to be defined in the database are the physical assets that support high-speed broadband

<sup>&</sup>lt;sup>1</sup> 'White', 'Grey' and 'Black' in this instance is terminology used in determining whether state intervention should be allowed and lawful under relevant state aid rules. Black, white and grey are useful conceptual tools used to distinguish between areas where no infrastructure exists (white) areas with only one infrastructure in place (grey) and areas where more than one network operator is present (black).

- networks. These physical assets are not limited to the infrastructures of electronic communications providers. Many existing and planned infrastructures could be useful to house high-speed broadband networks ducting, tunnels, masts and towers, building access points and internal ducting, poles and rights of way held by any network provider water, electricity, gas, sewerage, rail, airports, roads etc.
- Given that this infrastructure database could take time to compile and rely heavily on the resources of the existing infrastructure owners (including the state) to provide information, then a first step for regulatory intervention is to oblige all network owners to make their own information available to any seeker of information in respect of high-speed broadband investments. The necessary procedures, including site surveys, dispute resolution, information confidentiality and usage safeguards, are already understood by EU countries and can be used as models for implementation elsewhere.
- The widespread application of wholesale broadband access obligations for next generation technology networks. Here, the regulator has to balance the needs of a national operator to invest in widespread fibre networks (for seeking to maximise market share and secure reasonable returns) on the one hand, with the need to protect consumer choice and competitive efficiencies on the other hand. This is possible with proportional regulatory safeguards that can be imposed on the incumbent fibre networks. These measures ensure the equivalence of service to access seekers at the wholesale input level and the downstream retail service output level. With these safeguards in place the regulator can relax wholesale price caps and allow the incumbent to seek satisfactory returns for their fibre investment.
- Regulatory intervention can greatly assist potential infrastructure investments by providing a
  co-ordination role for planned civil works. Typically, up to 60-80% of the cost of fibre
  network construction is made up of passive infrastructures such as ducting and the
  associated cost of the civil works. Any sharing of costs between infrastructure investors will
  be beneficial. All planned civil works by any infrastructure operator should be transparent
  and the procedures for joint construction made available. A one-stop shop procedure for
  coordination of civil works, for obtaining the necessary permits, arranging site surveys and
  for agreeing terms of co-operation, including dispute resolution, should be provided.

The cost of upgrading in-building wiring for high-speed broadband is significant. The essential first enabler is to oblige all new building construction and significant building refurbishment schemes to be "broadband ready". Other regulatory enablers include the obligation for all existing rights of way holders to provide access to other high-speed broadband service providers and for all existing building access points and in-building ducting to be made available on an open access basis. The necessary procedures, including cost allocation and dispute resolution, are already understood by EU countries and can be used as models for implementation elsewhere.