

The Context of NGA Investments

Jonathan Liebenau, Patrik Kärrberg, Silvia Elaluf-Calderwood London School of Economics

agenda

- Investment in the digital agenda—scoping
- Traffic, quality, productivity
- Europe in the world picture
- LSE research on investment

attitudes/assumptions

- Trust in policy
- Parallels with other sectors
- Knowledge levels and types
- Risk assessment practices
- Temporal features

implications of traffic growth

- Innovations in traffic routing changes the architecture of revenues
- Investors are hesitant about network operators until they become beneficiaries of traffic growth
- Broadband build-out policy creates additional pressure for network investments

incentives for productivity growth

- The incentives that productivity growth provide managers to pay for premium services, cloud computing as example
- In addition to quantity issues (traffic volume) there are quality issues to consider for network build-out (time critical applications, flexibility, support)

europe in the world picture

- Telecom growing everywhere except Europe
- Light-handed independent network regulation is worldwide trend (Stimulating growth)
- Europe competes directly with internet services abroad (liberal policies, new opennes of the world, Europe can't be isolated from worldwide trends)

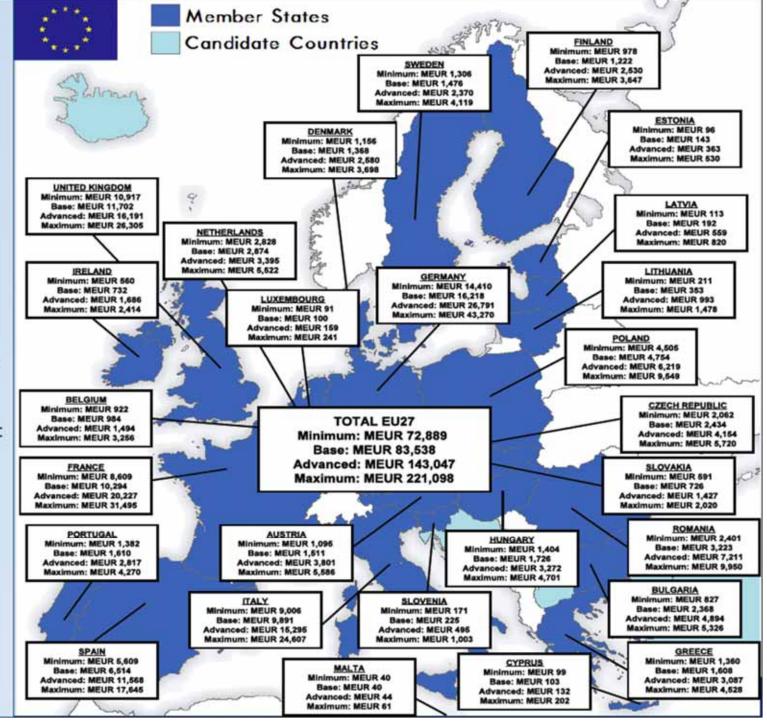
typical investor's concerns

- What is urgent? How much will late-comers really lose?
- In non-competitive areas, is there a choice between loosening access regulation and public subsidy?
- What risk premium will regulators attach to fibre investments?
- Is it feasible/desirable to get content and application providers [CAPs] to contribute to the burden of network/ISP investment?*

Cost per country

- Big 5 require between 63%-72% of the total cost (France, Germany, Italy, Spain and the United Kingdom) – with 62% of population!
- Rest of Europe consists of a heterogeneous sample of leading infrastructure: Belgium, Latvia and Slovenia together with poor infrastructure countries: Cyprus, Greece and Poland.
- Country-members have different infrastructural needs under the Digital Agenda umbrella
- EU15 share from total ranges between 80%-84%

Source: EIB



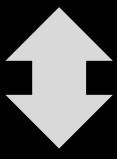
Investor perceptions

investors' perceptions of broadband risk (opinions and underlying reasons)

Repeated insistence that risk premiums remain unclear

Concern about what national differences would be allowed

Fear of instability; insufficient long term incentives for incumbents to roll out



Limited interest in long-term telecoms policy development

National differentiation is a common starting point for investment analysis

Underlying scepticism towards EU 2020 policy

