

Network externalities: work in ITU-T SG 3

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26 May 2008

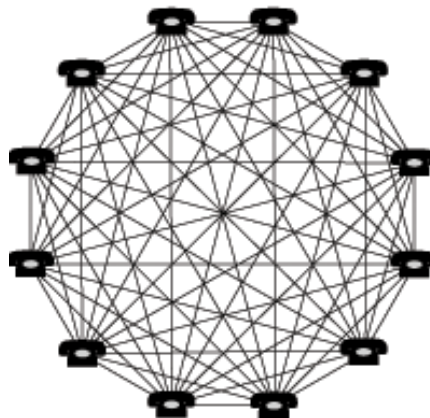
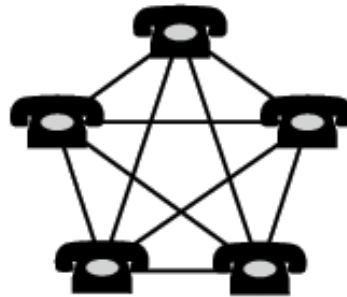
What are externalities?

- Positive/**negative** externalities are “spillovers”:
 - A person’s actions give rise to a **benefit/cost** ...that is experienced not by that person but by **other people**... and hence the person has no incentive to take this benefit/**cost** into account in their actions ...and **hence does not take it into account**

What are network externalities?

- “Network **externalities**” – value of product/service increases as more and more people adopt it
 - Decision whether or not to join network does not take into account the value placed upon interacting with that person by existing users
 - User will not join if own benefit less than cost – lost opportunity for all others
- Negative network effects – e.g. congestion
- **One way** to improve overall social welfare is via a **subsidy, targeted** to those who would not join the network based on their consideration of their *own* benefit and cost
- Several ways of funding this subsidy. One way is to for the subsidy to be funded by others users

Network effects – in telecoms



Network externalities : ITU-T SG3 Rapporteurs Group

- Set up in 2002/3
- Purpose = consider the issue of network externalities and international accounting rates
- Questionnaire in July 2006
- Workshop in September 2007
- April 2008 Draft recommendation proposed by Cameroon and Cote D'Ivoire
- Revised recommendation determined under TAP to be considered for approval at WTSA

Network externalities draft recommendation 1

That developing countries examine whether it would be appropriate for a premium, referred to as a network externality premium, to be a non-cost, additional element, on the accounting rate for incoming international traffic by the operators of developed networks to the operators of developing-country networks;

That this premium be negotiated on a commercial bilateral basis;

That this premium be paid on the tariff for incoming international traffic from developed countries to developing countries, in other words, that it be a non-cost, additional element on the termination rate/accounting rate;

Network externalities draft recommendation 2

That the funds made available by the network externality premium, be used exclusively for extending networks in developing countries

that the use of the funds made available by the network externality premium be monitored by the concerned parties, as mutually agreed, with appropriate oversight.

Recap on externalities – positive externality

positive externality

