Universal service in the Accession countries
Study recommendations

ITU Seminar

Bratislava, 5-7 March 2002

Jan H. Guettler
Cullen International

jan.guettler@cullen-international.com

CI / WIK Study

- Study for the European Commission
- Completed June 2001

1. Information
    1. Legislation and policy programs
    2. Results achieved
2. Analysis and assessments
    1. Assessment of national legislation vs ”acquis communautaire”
    2. General economic analysis of universal service issues in a ”typical accession country”
    3. Assessment of national legislation vs the ”ideal policy” suggested by general economic analysis
    4. Recommendations for policy development for each country

The study team

Cullen International (CI)

- Private commercial company with headquarter in Belgium
- Specialises in regulatory support services
    - Telecommunications and e-commerce
    - Europe and United States

Wissenschaftliches Institut für Kommunikationsdienste (WIK)

- Owned by the German Government
- Specialises in economic analysis of telecommunications and postal issues

Presentation outline

1. Potential problems with EU requirements
2. Study recommendations
3. Can EU requirements and study recommendations be reconciled?

Neutral study approach

Are the USO requirements
set out by the EU directives
appropriate for the Accession Countries?

If not, what type of alternative USO policies
should they adopt?

EU policy implication (1)

EU requirement:

- Telephony should be affordable to everyone regardless of geographic location

Policy implications:

- For high income country
  - Developed network
  - USO cost 0.2 - 3% of revenue
- For low income countries
  - Network not fully developed
  - Much higher cost
    - Will require significant cost subsidy
    - Question of national priority

Question of national priority

- Significant subsidy means allocation of scarce national resources!
- Universal service fund ”paid by industry”?
  - Industry must keep higher prices to cover cost
  - Therefore the fund will be paid for by the users
  - Often called a ”hidden tax”
- Universal telephony service competes for funds with:
  - education
  - health service
  - old age pensions
  - etc.
- Is USO a correct priority for all Accession Countries?

Study conclusion: EU’s USO requirement can be too expensive!

EU policy implication (2)

EU requirement:

- Access to fixed network – including access to Internet, fax

Policy implications:

- Preference for fixed network communication over mobile
- Probable intention: Keep obligation simple and inexpensive
    - broadband access was rejected because of cost

Situation in some accession countries today:

- mobile offerings cost less than fixed offerings
- more mobile subscribers than fixed subscribers

Potential consequences

If it is so that:

- mobile telephony is cheaper than fixed telephony;
- users, in particular low income users, prefer mobile over fixed telephony

then EU's universal service requirement's focus on fixed telephony:

- is a biased requirement – which could lead to a situation where mobile operators would have to subsidise their fixed network competitors;
- could be seen as a violation of the requirement of the Framework Directive that regulations should be technology neutral

Extract from
Recital 5 of USO Directive as amended June 27, 2001

.....it is not appropriate to mandate a specific data or bit rate at Community level. Currently available voice band modems typically offer a data rate of 56 kbit/s and employ automatic data rate adaptation to cater for variable line quality, with the result that the achieved data rate may be lower than 56 kbit/s. Flexibility is required on the one hand to allow Member States to take measures where necessary to ensure that connections are capable of supporting such a data rate, and on the other hand to allow Member States where relevant to permit data rates below this upper limit of 56 kbits/sec in order, for example, **to exploit the capabilities of wireless technologies (including cellular wireless networks) to deliver universal service** to a higher proportion of the population. This may be of **particular importance in some accession countries** where household penetration of traditional telephone connections remains relatively low. **.....**

Study recommendations

1. Cyprus, Malta and possibly Slovenia should implement the EU USO requirements
2. The other accession countries should
   - focus on policies that will foster network and subscriber growth under commercial non-subsidised conditions in a fair competitive environment
   - postpone formal EU universal service requirements

Why USO policies?

Sound arguments

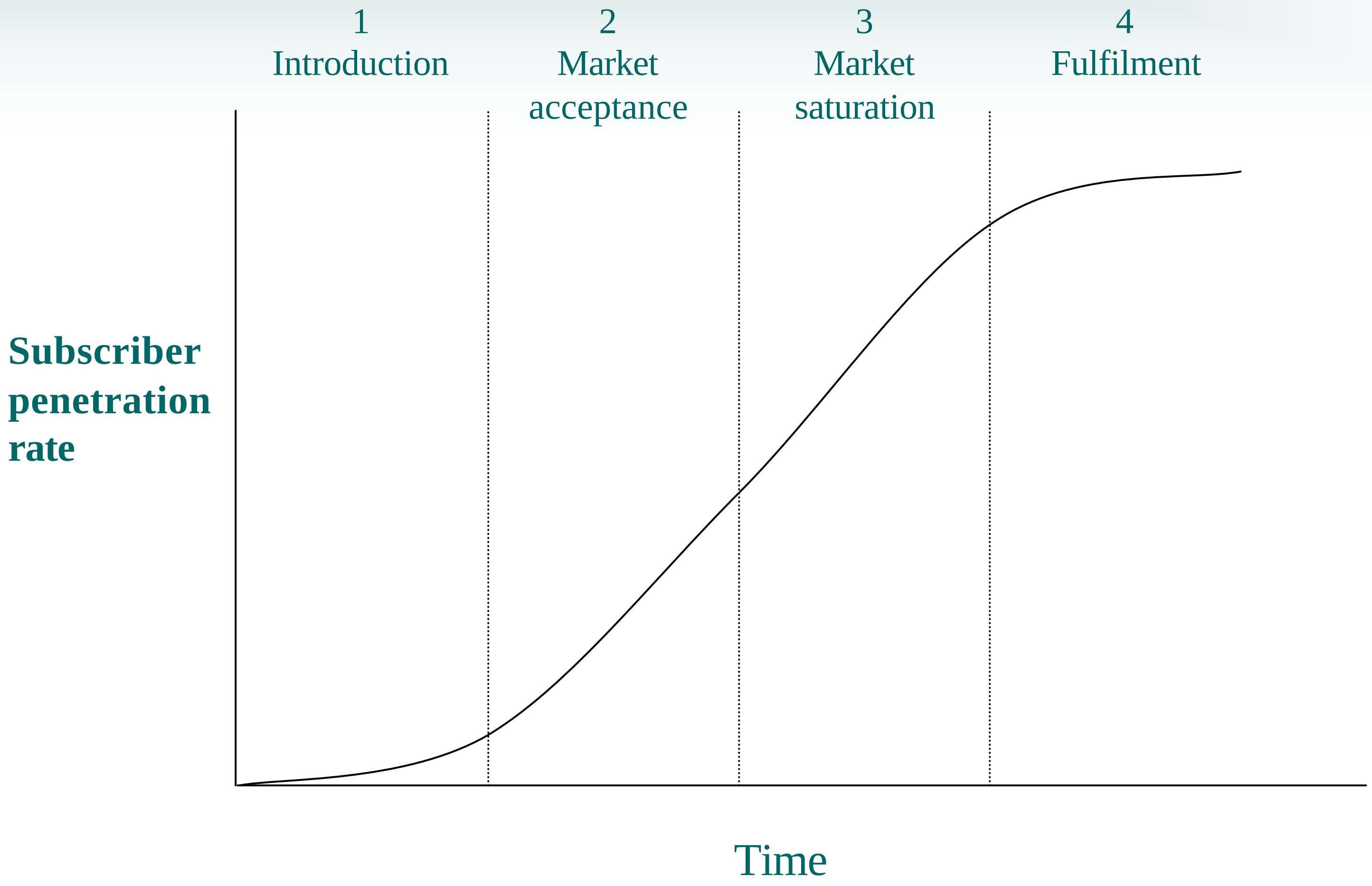
1. Consumer protection arguments:
   - Prevention of excessive prices in non-competitive areas
2. Economic arguments:
   - Network externalities
3. Social arguments:
   - Communication is so essential that society should provide it for those who cannot afford it

Political argument

- Shifts costs away from voters
- Visible benefits / invisible costs

Not conceived as a policy to accelerate network development!

Network growth phases:



USO should not be considered before phase 4

Typical accession country

- Relatively low GDP compared with EU Member States
- Relatively low fixed network penetration compared with EU
- Much higher penetration in urban areas than in rural areas
- Very low penetration in some particular rural areas
- Unbalanced tariffs / access deficits
- Full liberalisation from 2003

- Strong growth in mobile telephony

Economic realities

If the objective is to accelerate network development, certain USO policies can be counterproductive:

- Tariff averaging
- Prevention of tariff rebalancing (access deficits)
- Delivery obligations
- Introduction of USO funding arrangements

Sufficient revenues must be generated to sustain further network development

Tariff averaging

Tariff averaging means that:

- Urban users pay more than they otherwise would have to
    - More subscribers possible with lower price
- Rural users are often uneconomic for the operator(s)
    - More subscribers possible with higher price
- Those among urban users who are poor are required to subsidise those among rural users that are rich
    - Subsidy is untargeted and therefore inefficient

Access deficits

Access deficits means:

- insufficient revenue for further network investments
- a revenue shortfall that must be met by a subsidy
    - internal subsidy
        - from long distance and international calls to access (from high price elasticity to low price elasticity)
        - cannot be sustained in a competitive environment
    - external subsidy
        - from taxes? (Theoretical)
        - from other operators? (Against EU regulations)

Must be terminated according to EU "acquis communautaire"

Delivery obligations

- One of the regulatory parameters considered by investors
  - Adds costs
  - Makes investments less attractive
- Obligations may be unfair without a USO financing scheme

USO financing scheme

- Difficult to implement correctly
- Challenge for NRA
    - Advanced economic concepts
    - Requires access to good accounting data
    - Bad experience in EU:
        - France reprimanded by European Court for:
            - unfair burden on competitive operators (in 1997)
            - late rebalancing of tariffs
            - improper calculation of access deficits
            - insufficient justification of USO costs
            - underestimation of revenues
            - lack of transparency
        - Now discussing how to pay back excessive subsidies
- Could disencourage competitive investors – concerns:
    - cost / uncertainty
    - subsidy for incumbent fixed operator?

Main recommendations

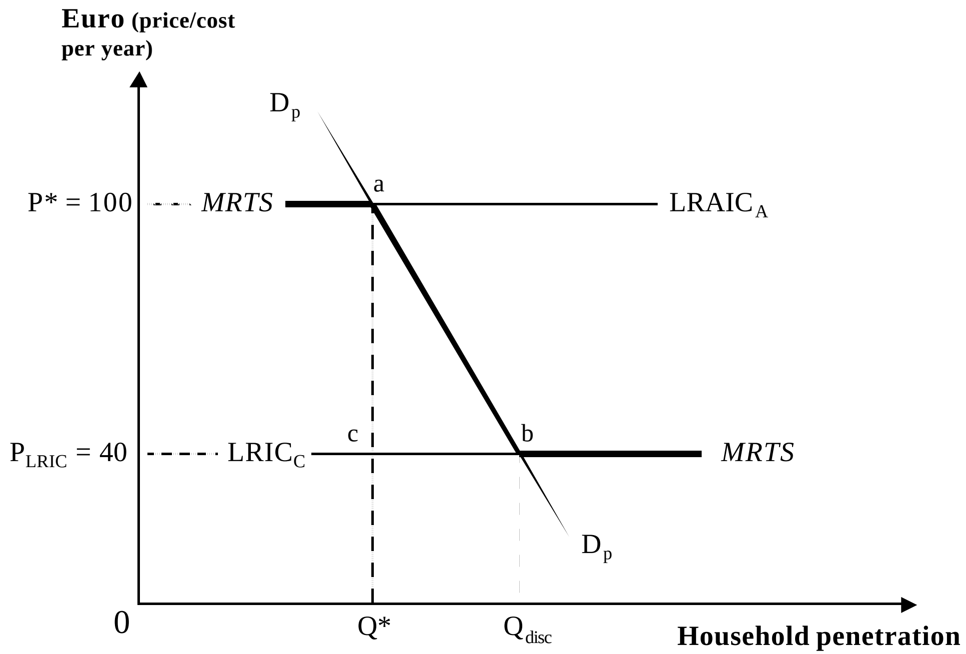
1. Self select tariff packages
2. Tariff de-averaging (if funds are insufficient for network development)
3. Wait some years before imposing formal delivery obligations. Let market forces build the network. When market based demand is beginning to be fulfilled, delivery obligations can be considered in order to reach full coverage.
   - Universal access rather than universal service

Other recommendations

- ensure regulatory credibility / independence
- tariff rebalancing
- have simple licensing scheme
- avoid high licence fees
  - except where there are limited resources
- do not restrict too tightly the profitability of the incumbent
- avoid specific fines

Self select tariff packages

Objective: Efficient allocation of common costs in a way that encourages universal service



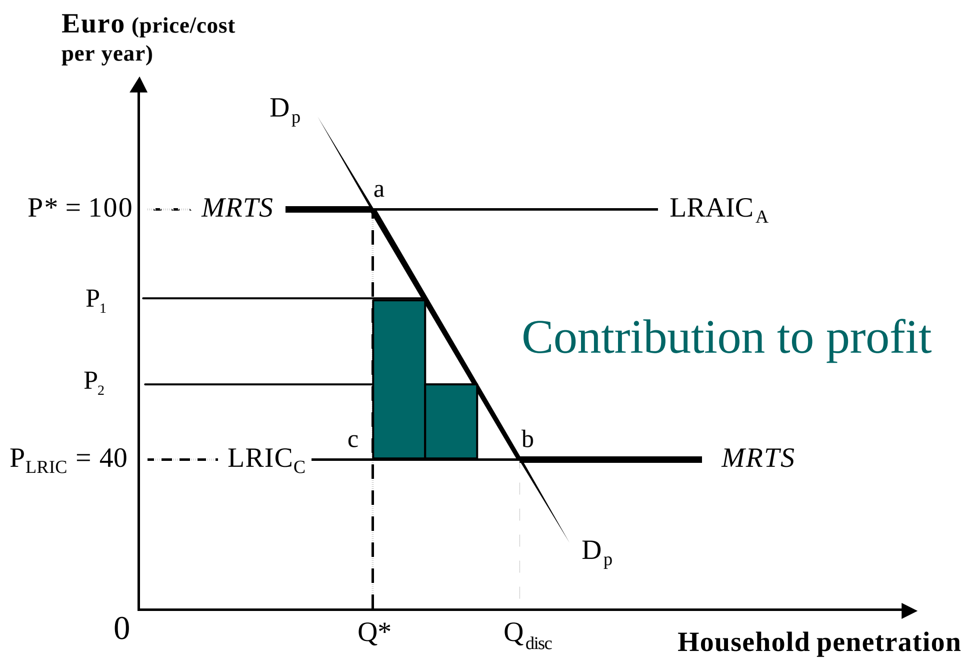
MRTS = marginal readiness to supply curve of the operator
Source: WIK own construction

Similar to business class and tourist class in aviation industry

Commercial behaviour by operators – no USO cost involved

Self select tariff packages

Objective: Efficient allocation of common costs in a way that encourages universal service



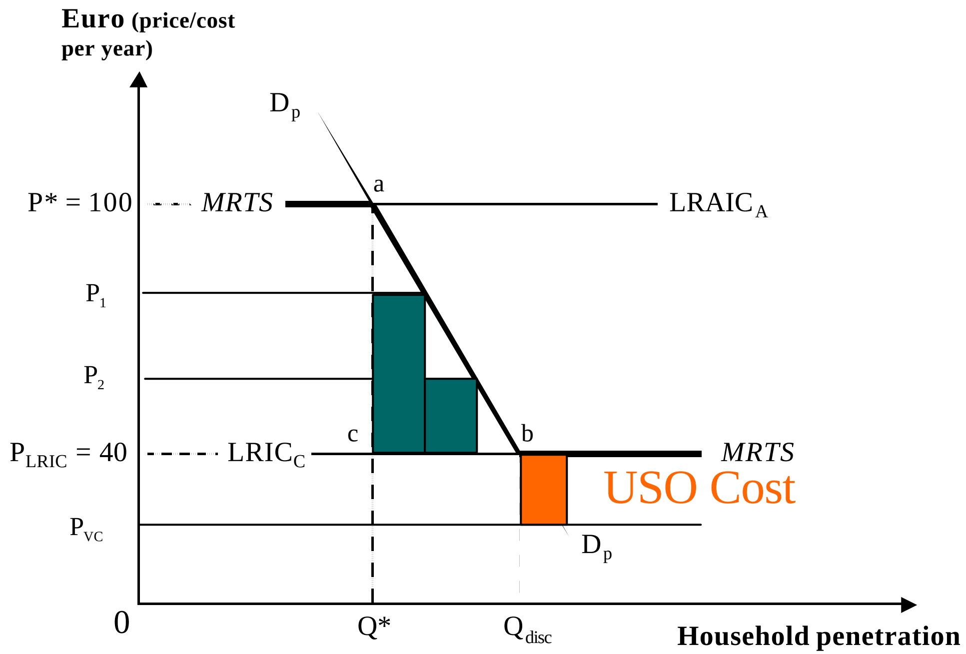
MRTS = marginal readiness to supply curve of the operator
Source: WIK own construction

Similar to business class and tourist class in aviation industry

Commercial behaviour by operators – no USO cost involved

Self select tariff packages

Objective: Efficient allocation of common costs in a way that encourages universal service



MRTS = marginal readiness to supply curve of the operator
Source: WIK own construction

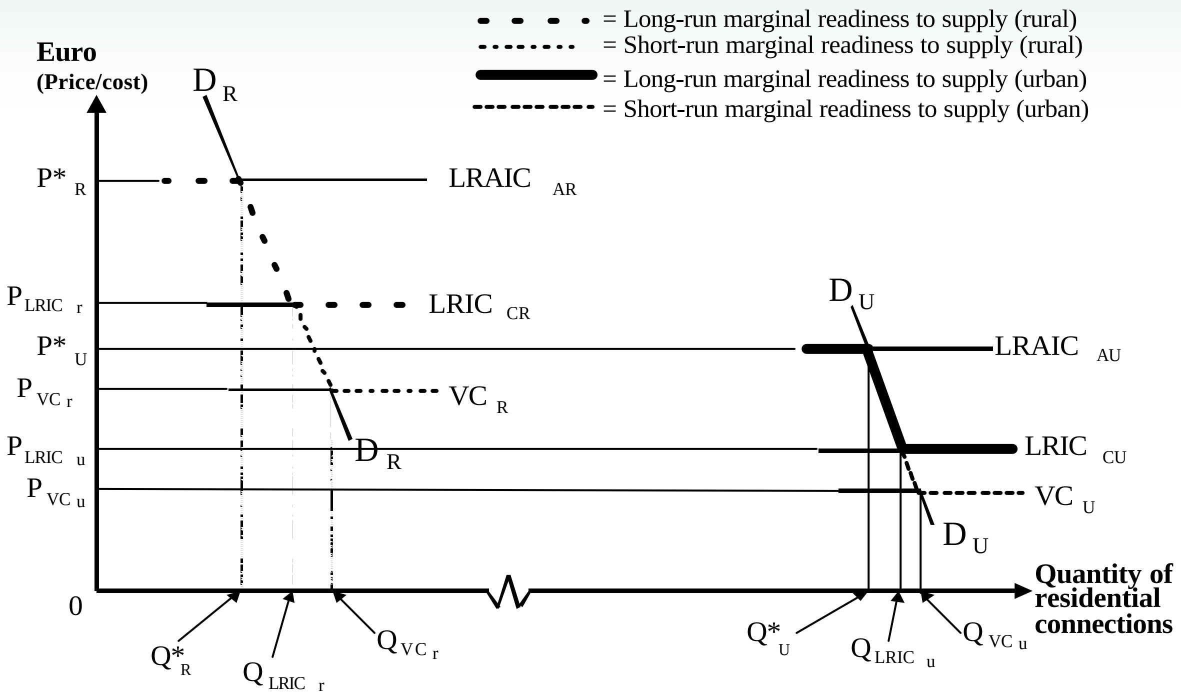
Similar to business class and tourist class in aviation industry
Commercial behaviour by operators – no USO cost involved

Self select tariff packages

- Business / residential differentiation
- Multiple tariff package offerings:
  - High fixed price / all local/regional costs free
  -
  - Very low fixed price / limited number of free or cheap calls per month / after that high prices
- Self-selection means:
  - targeted subsidy
    - those that can afford it (and need the full service) pay the common cost
    - the less affluent benefit from the lower price
  - no need for (public) administration
  - need for regulatory support

Tariff de-averaging

Objective: Prices more closely aligned with ability to pay and cost



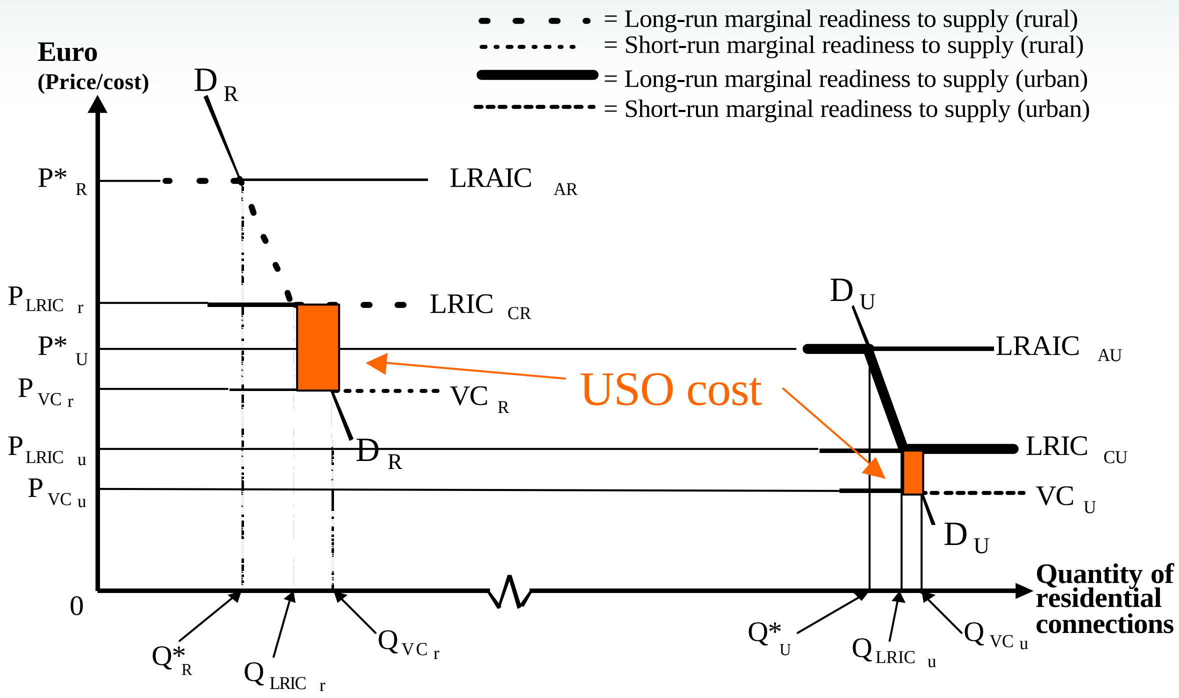
Note: Graphed differences between rural and urban prices / costs should not be interpreted as being in proportion to actual difference.

Source: WIK own construction

In combination with self-select tariff packages

Tariff de-averaging

Objective: Prices more closely aligned with ability to pay and cost



Note: Graphed differences between rural and urban prices / costs should not be interpreted as being in proportion to actual difference.

Source: WIK own construction

In combination with self-select tariff packages

Tariff de-averaging

If network growth is restricted by lack of supply

Urban / rural differentiation

- 2 – 3 tariff zones
  - each with self-select packages
- Regulatory oversight necessary

Can the study recommendations be reconciled with the Universal Service Directive