Adding cost-drivers to the pricing process by using a bottom-up cost-allocation approach

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Who are we?

Ghent University - Belgium

Faculty of Engineering

Department of Information Technology (**INTEC**)
more than 200 scientific researchers working in many fields related to the domain of information and communication technologies (hardware and software)

INTEC Broadband Communication Networks (**IBCN**)
research and software development for telecommunication systems (network design, network management, network interoperability)

COMSOF
commercial spin-off company from INTEC offering high-technological know-how to telecommunication industry in domains such as network design, **network cost modelling**, network management, digital TV, software engeneering through consultancy projects and software development.

Return of the profit…

How?

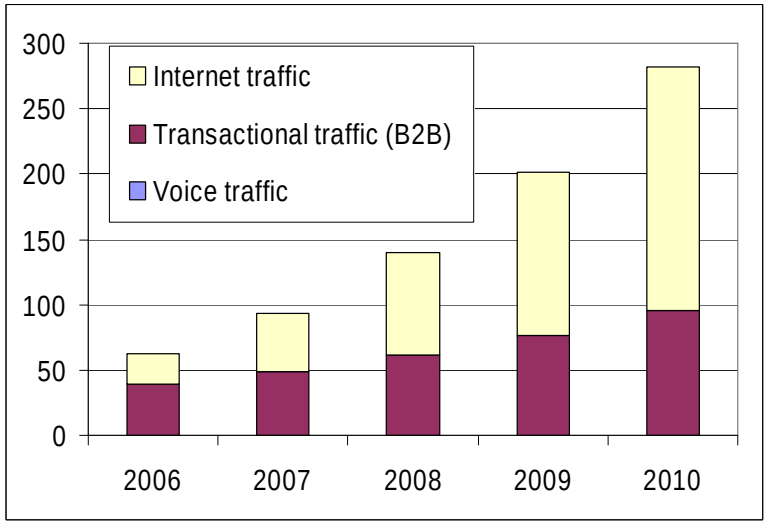
Make sure you have an accurate insight on costs and revenues to be expected before deciding to deploy a new service

Outline

- Introduction
- Cost driven pricing
- Case study
- Conclusions

Market situation

European Traffic estimation (Tbps)



- Exponential growth
- Fast technological evolution
- Competitive market

→Economical playground

ROI, IRR, NPV, **Pricing**...

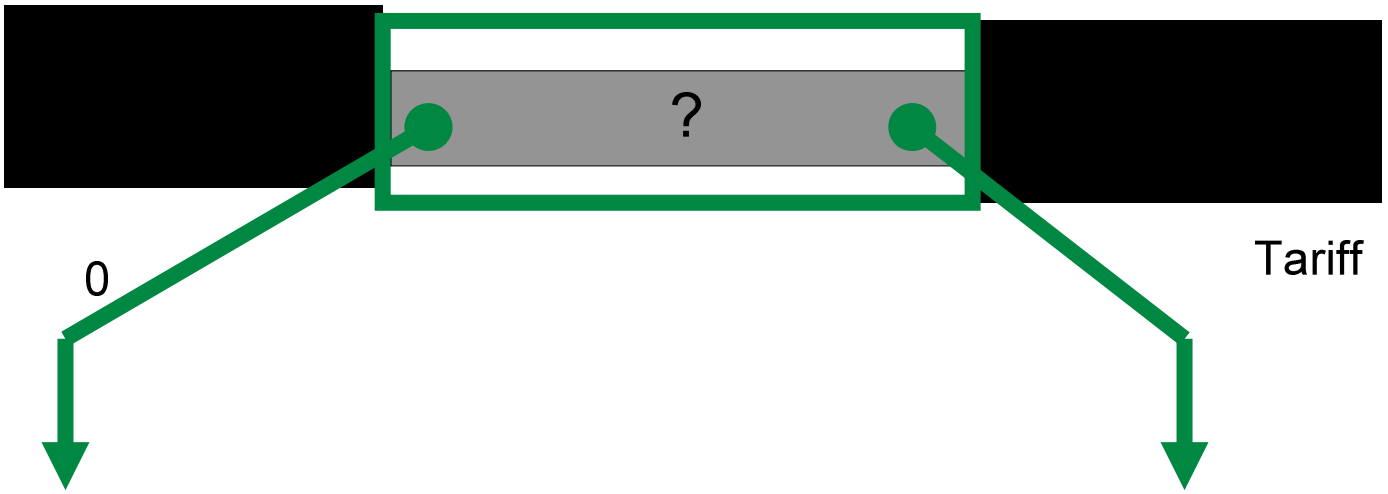
Pricing

- Pricing scheme
  - Flat
  - Usage-based
  - Time-based
  - Auction-based
  - …

- Pricing tariff
  - Sustainable
  - Competitive

How to determine such an optimal tariff?

Pricing Margins

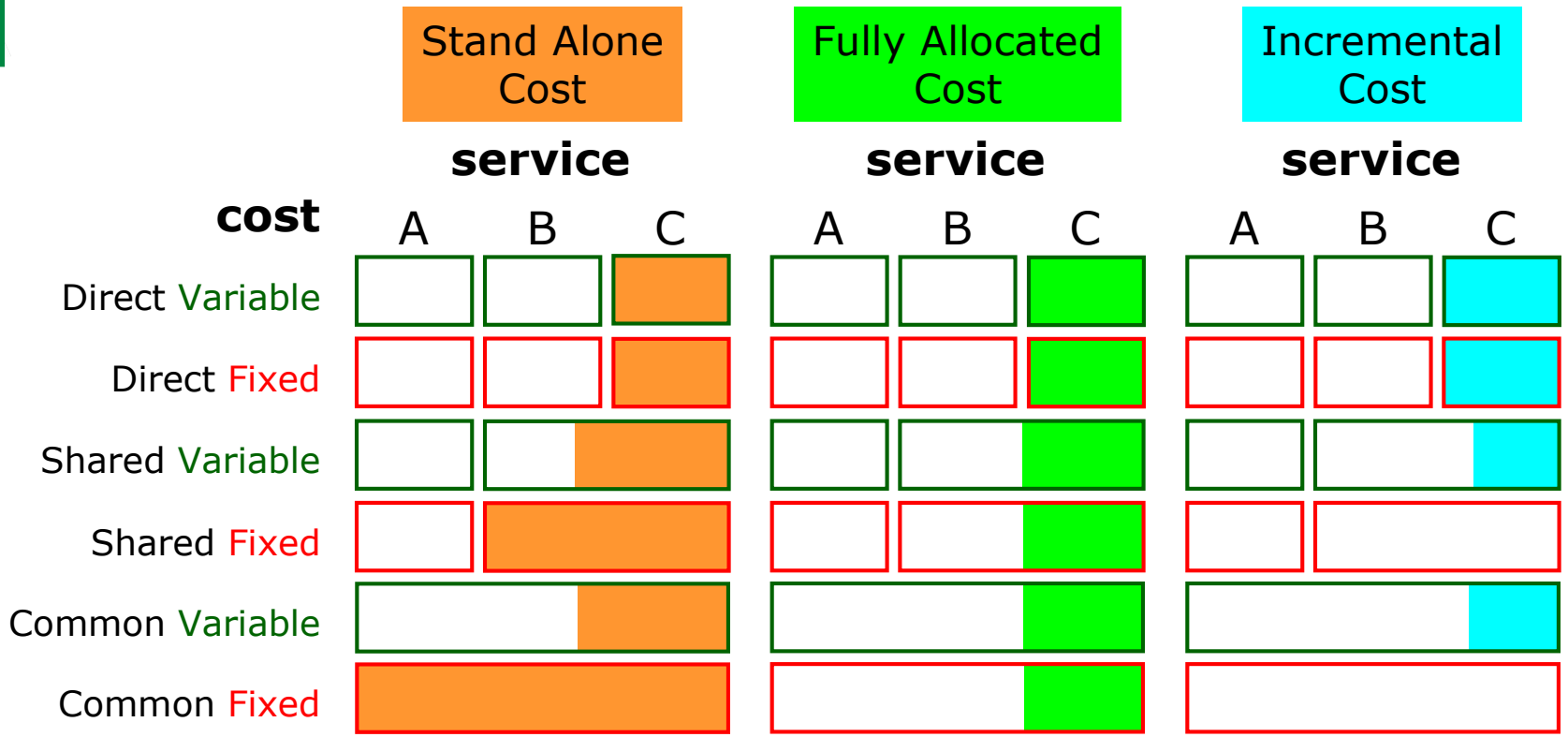


Sustainable price ?

Competitive price ?

Narrowing down margins
→ important pricing information
→ stay both competitive and profitable

Cost accounting



Cost for offering service C without offering services A and B

Proportional Cost for offering service C when offered in combination with services A and B

Additional Cost for offering service C when already offering services A and B

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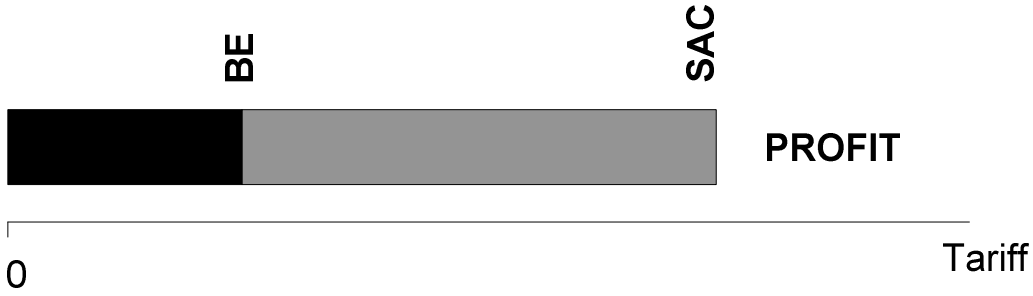
Outer margins



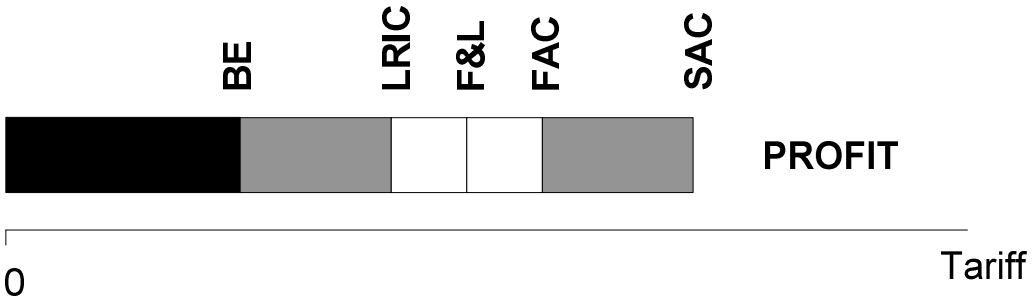
- Break even

  Cost service = Total Cost – Total revenue other services

- Stand alone

  Cost service = Cost calculated as in SAC (no EOS)

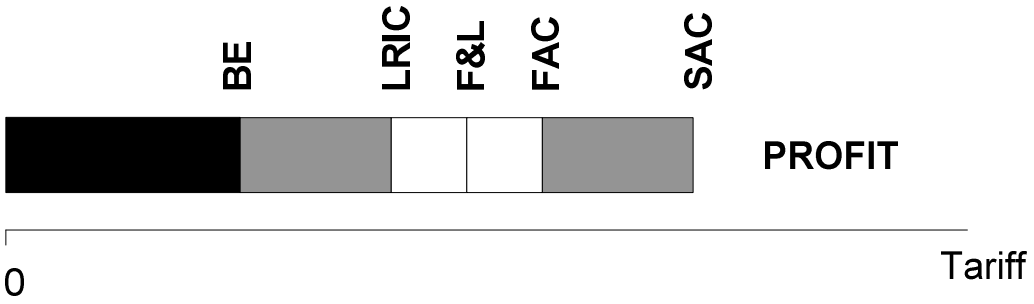
Narrowing down



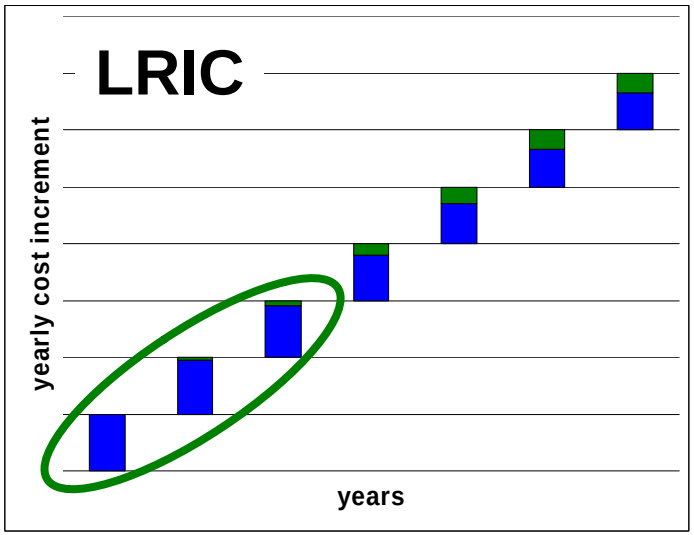
- Incremental (LRIC)
  Calculated as in LRIC

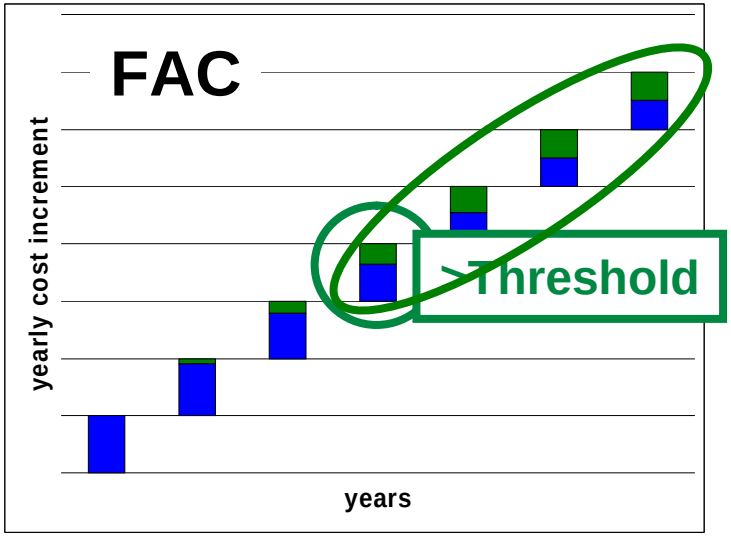
- Fully Allocated (FAC)
  Calculated as in FAC

Narrowing down (2)



- Optimal combination (F&L)





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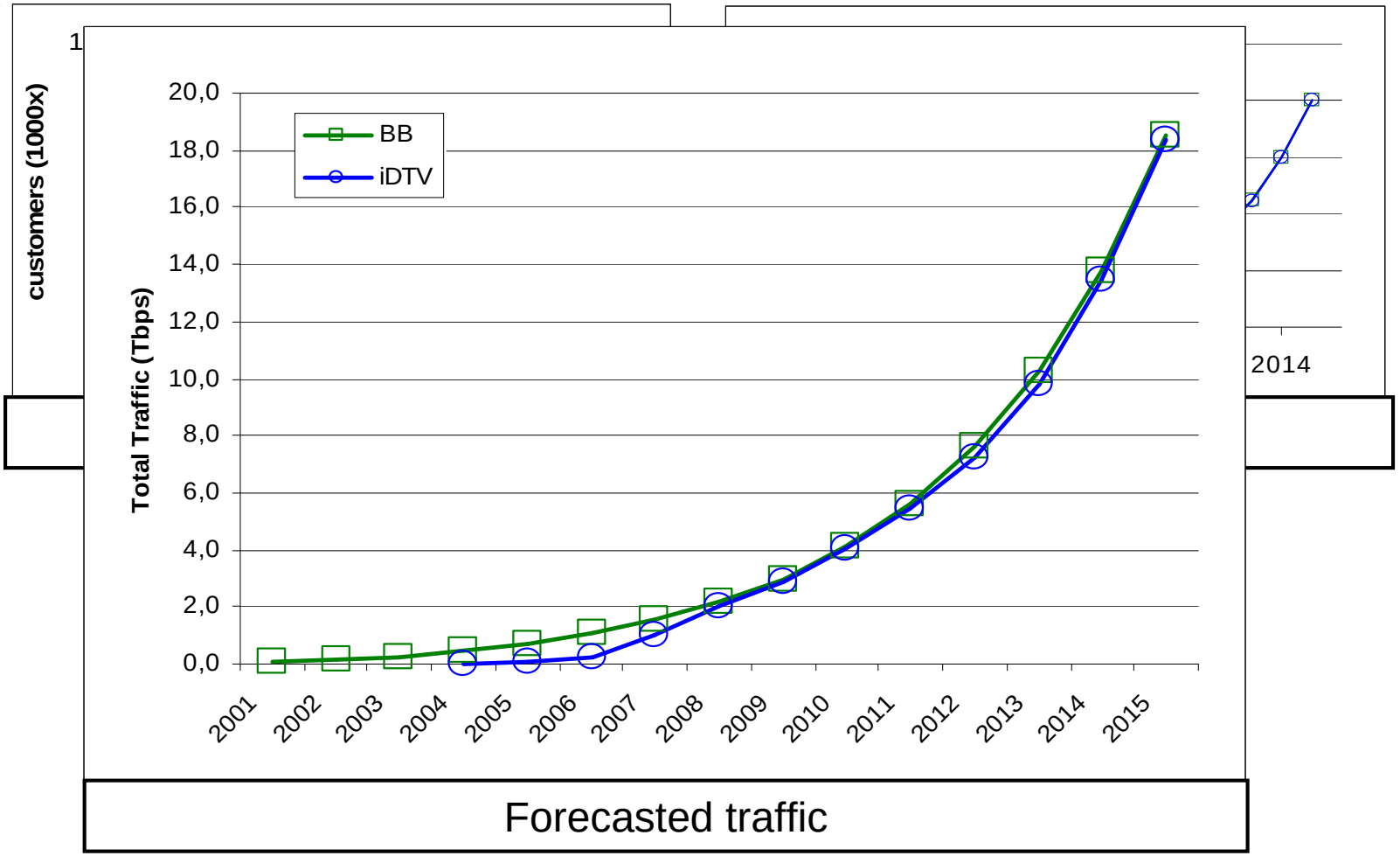
Case Study

Introduction of an iDTV-service

- Existing Broadband internet-access
- Planning period 2004 → 2015
- EOS – capacity x 25 → cost x 8
- Cost-erosion exponentially (10%)
- NPV (10%)

Case Study – input

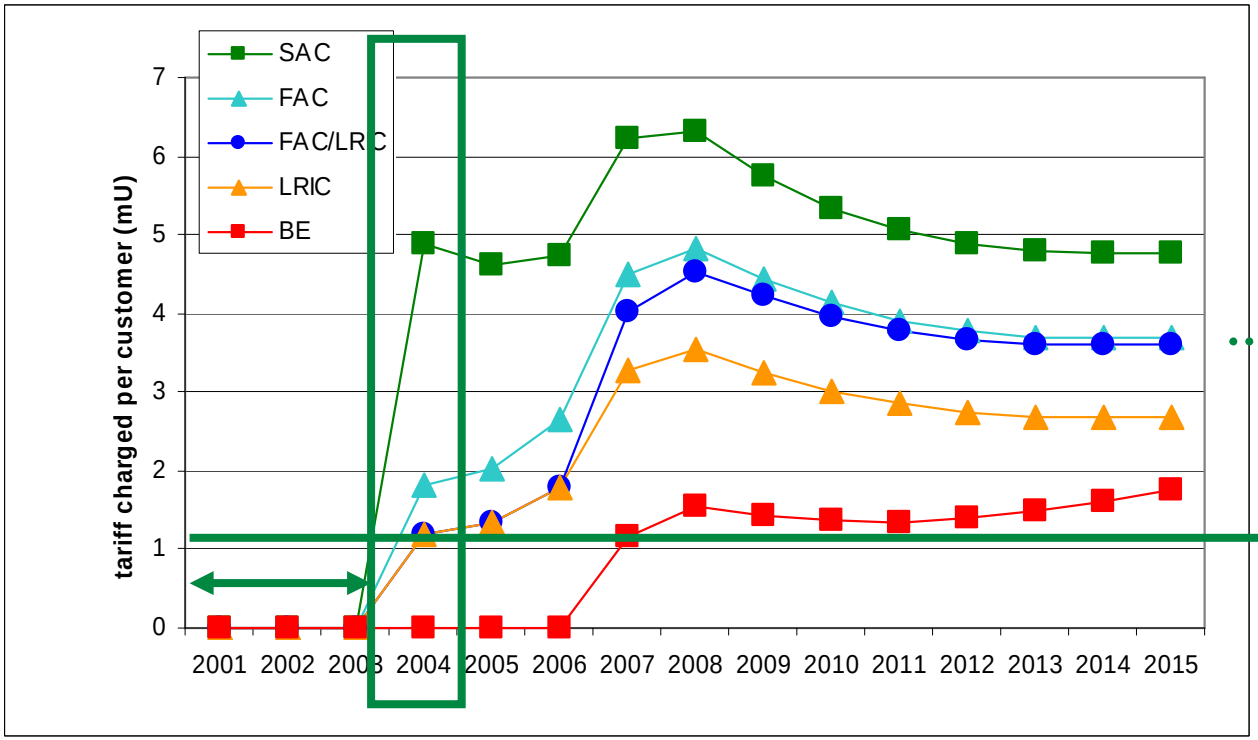


BB

iDTV

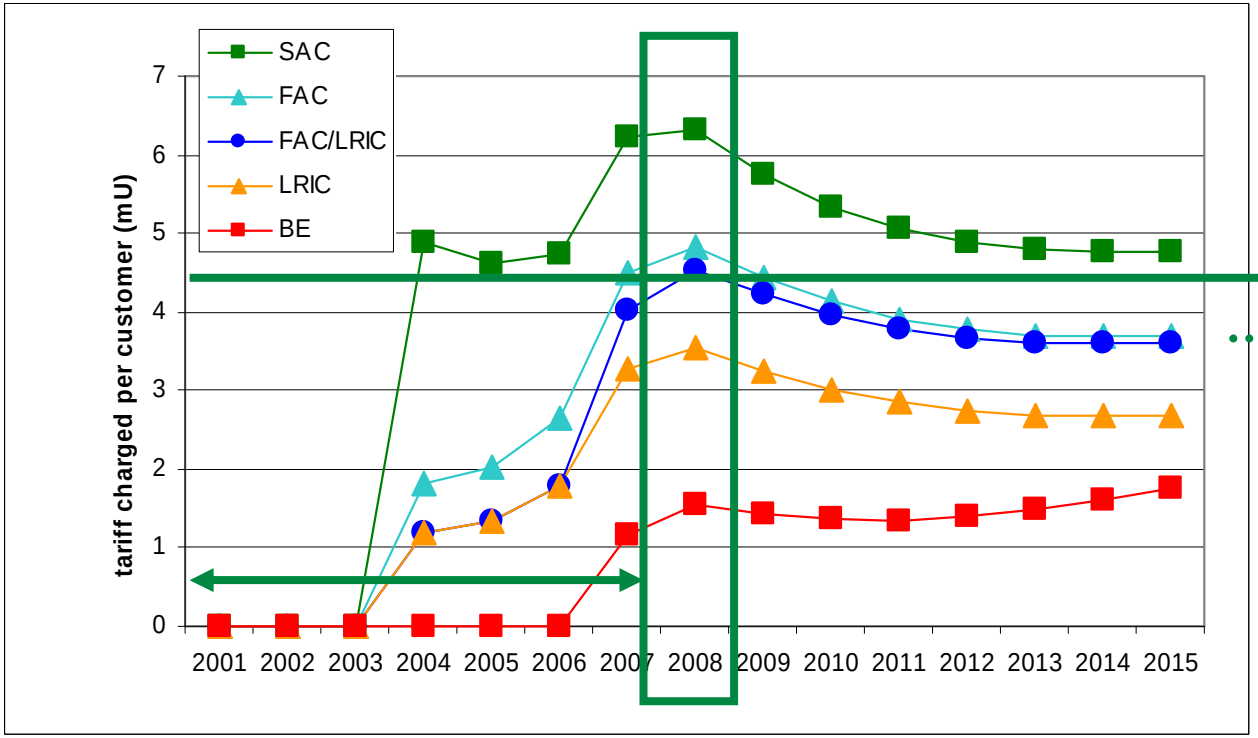
Case Study

- Resulting margins



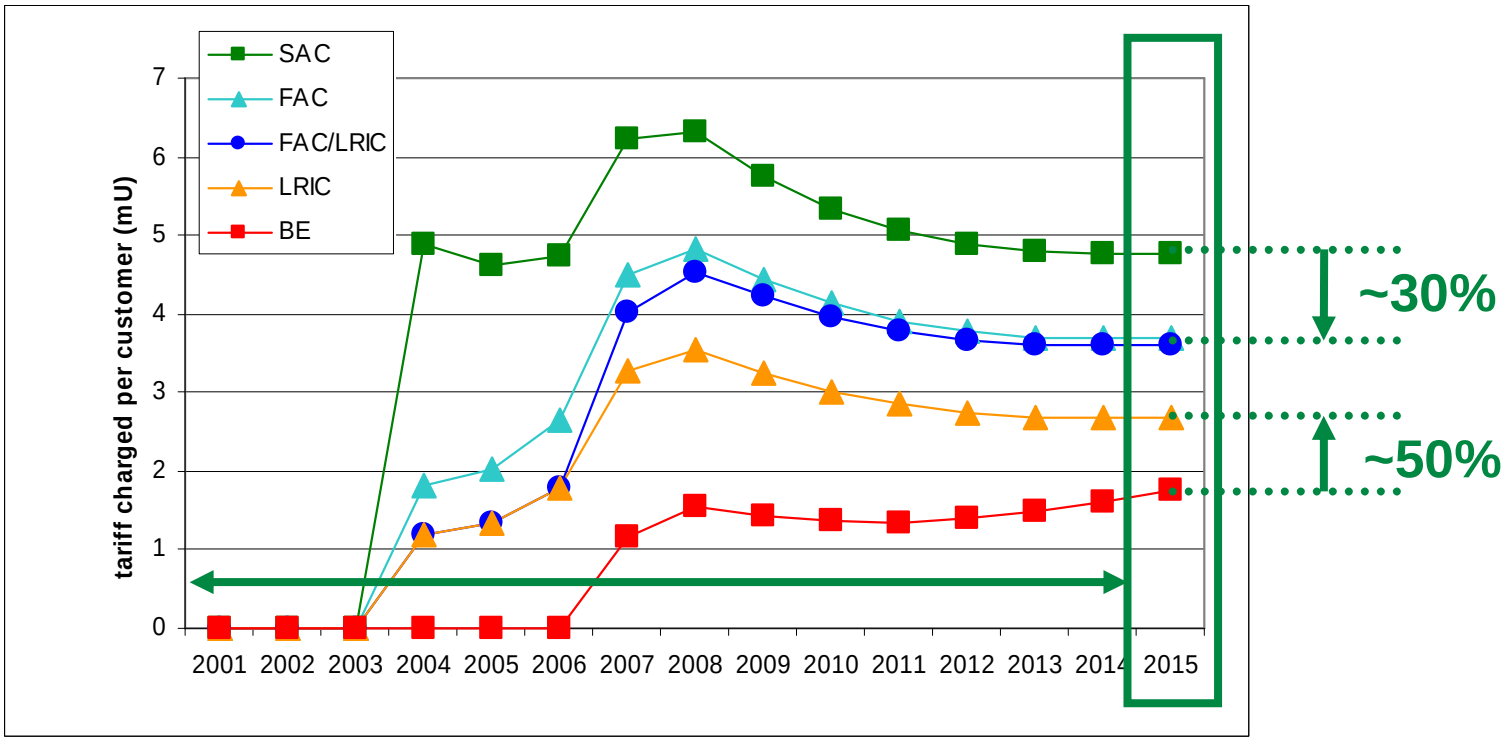
Case Study

- Resulting margins



Case Study

- Resulting margins



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Conclusions

- Outer margins
  - Easy calculations (No cost-allocation)
  - Only sure loss or profit
- Narrowing down
  - Using cost-allocation (LRIC and FAC)
  - Combination of LRIC and FAC
  - Large impact (Case study)
    - 30% beneath upper margin
    - 50% above lower margin
    - Initial phase unreliable → long planning period necessary
  - Sustainable and Competitive

Future work

- Margin-evolution of existing services
- Sensitivity of the results
- Influence of elasticity on the forecast (iterative calculations)

Future work

- Develop Integrated Software Tool
  - allowing the user to
    - determine optimal tariffs for (future) services
    - perform well-grounded profitability analysis for (future) services
    - compare different scenarios for network technological evolution
  - integrating advanced Network planning (CapEx), OpEx dimensioning, cost allocation and economic analysis

Thank you for your attention

Questions ?

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