

***Socio-Economic Services for
European Research Projects (SESERV)***

European Seventh Framework CSA FP7-2010-ICT-258138



Internet Tussles involving Information

UZH, IT Innovation, AUEB, UOX, ALBLF, AOSAE

**Information as an Economic Good
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The SESERV CSA

- *Socio-Economics Service for European Research Projects*
- Main topic: the socio-economic impact of **tussles** in FI

- Tussle investigation methodology:
 - Identify **stakeholders** for a certain functionality & **tussles** among them
 - Then, identify distribution of **control** across stakeholders
 - If control is imbalanced: assess the **socio-economic impact**
 - Identify potential gains of disadvantaged stakeholders by using **other protocols/tricks**
 - And possible negative impact on other functionalities (tussle spill-over)
 - For each new protocol/trick, apply the methodology again.

Tussle Taxonomy: Main Patterns

- **Contention** over a resource:
 - Consumer – consumer or provider – provider

- **Repurposing** of a resource:
 - Consumer – provider

- **Control** of the selection of a complementary resource:
 - Consumer/provider – provider

- **Responsibility** for the misuse of a resource:
 - Provider – provider

- C. Kalogiros, C. Courcoubetis, G. D. Stamoulis, M. Boniface, E. T. Meyer, M. Waldburger, D. Field and B. Stiller, “An Approach to Investigating Socio-economic Tussles Arising from Building the Future Internet“, in FIA Book 2011

Information Asymmetry

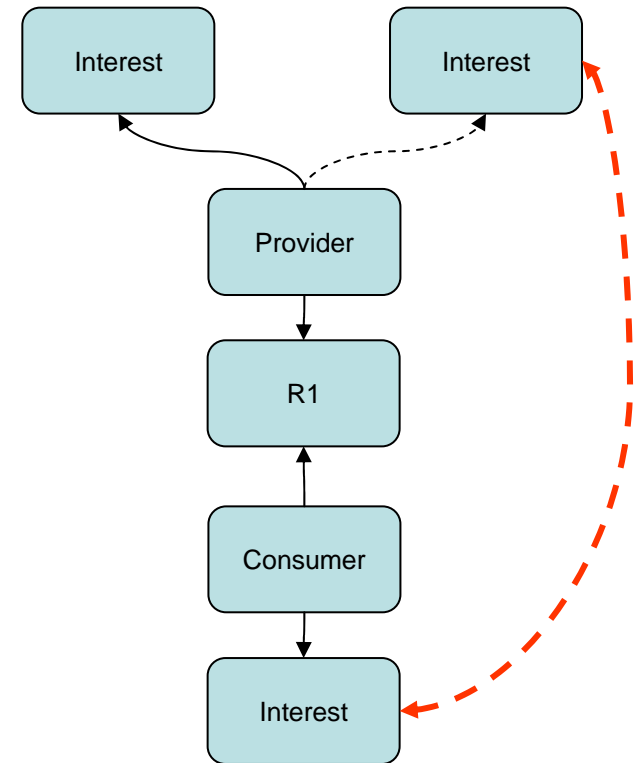
- ISPs have **private** access to information
 - This can be used for controlling the service outcome in a distributed scenario

- Sharing of **SLA-monitoring** info: **responsibility** tussle:
 - In case of SLA violation, ISPs have no incentive to **report truthfully** their effort for inter-domain service provision

- Propagation of **routing information: contention** tussle
 - An ISP can manipulate BGP routing advertisements, in order to attract more traffic
 - i.e. by announcing de-aggregated prefixes

Information Monetization

- Providers can collect **personal** data from consumer activity
 - This data can be turned into **valuable information** by identifying consumer behaviour patterns
 - E.g.: Recommendation of products based on consumer's purchasing and search history
- **Repurposing** tussle between providers and consumers regarding how their data is exploited



Thank you for your attention!