National Broadband Government Think Tank (Sweden) - An Example of Technical Policy Development

Maria Häll & Patrik Fältström

Swedish Government IT Policy and Strategy Group

April 28, 2006

REGERINGSKANSLIET

Government Offices of Sweden

Background and role

- **Swedish Government forms the IT Policy Strategy Group**
  - decision in June 2003
- **Political initiative**
  - non political group
- **Meetings with IT minister Ulrica Messing once a month**
- **Advisory to the government and all ministries in IT policy areas**
- **The IT policy Strategy Group**
  - 8 external members, internal administrative office of 5 people

Foto: Magnus Fond

REGERINGSKANSLIET

Government Offices of Sweden

IT Policy Strategy Group

Ylva Hambraeus Björling
(Chair) CEO Swedish IT & Telecom Industry

Bo Dahlbom
Research Director, Swedish IT Institute, Professor at IT-university in Gothenburg

Nadja Lyberg
Nurse, Regional safety officer, Swedish Municipal Workers Union

Suss Forssman Thullberg
Head of department, The Swedish National Agency for School Improvement

Patrik Fältström
Network/Internet expert, Cisco Systems

Stefan Hedin
Mayor, City of Sandviken

Shirin Laji
3G- and telecom-issues, Ericsson

Kenneth Olausson
CEO, Innovation Impact AB

REGERINGSKANSLIET

Government Offices of Sweden
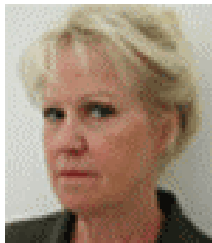
IT Policy Strategy Group
Administrative office
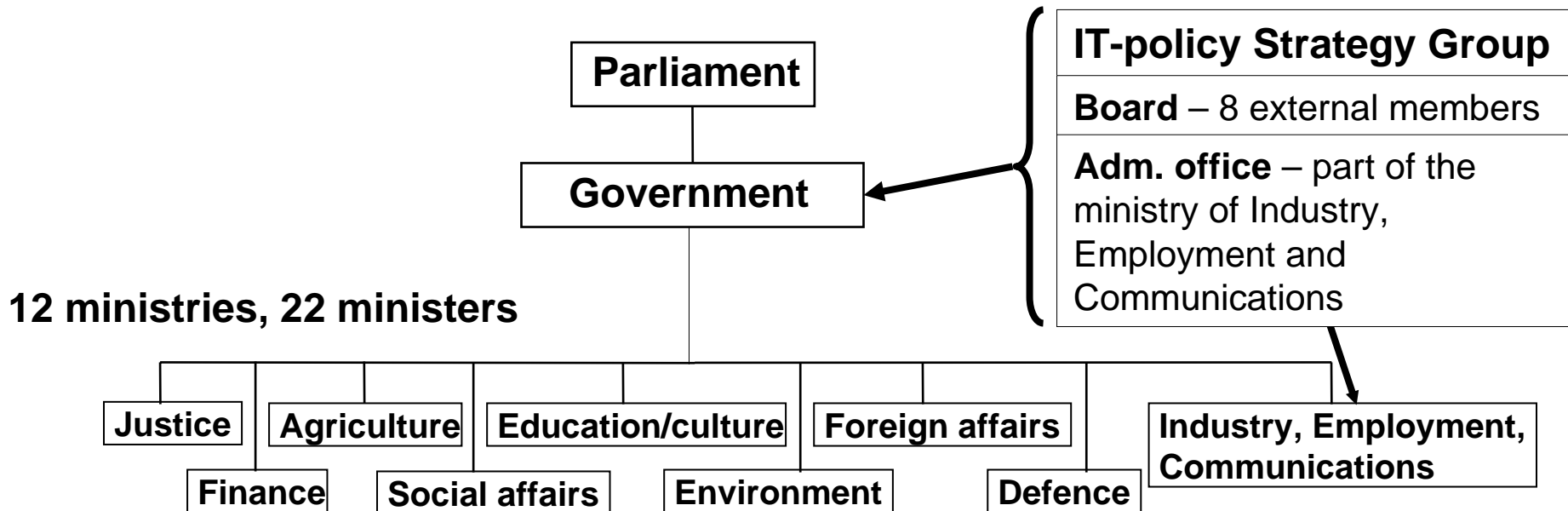
Maria Häll
Administrative Director

Caroline Andersson
Torbjörn Skarin
Carolina Otterskog
Senior Administrative Officers

Monica Tornberg
Assistant

Organization of the Government and the IT-policy Strategy Group

Parliament

Government

12 ministries, 22 ministers

Justice | **Agriculture** | **Education/culture** | **Foreign affairs** | **Industry, Employment, Communications**

Finance | **Social affairs** | **Environment** | **Defence**

IT-policy Strategy Group

Board – 8 external members

Adm. office – part of the ministry of Industry, Employment and Communications

Ministry of Industry, Employment and Communications

POLITICAL APPOINTEES

Minister for Industry and Trade
Thomas Östros

State Secretaries
Sven-Eric Söder
Lars-Olof Lindgren

Minister for Communications and Regional Policy
Ulrica Messing

State Secretary
Jonas Bjelfvenstam

Minister for Employment
Hans Karlsson

State Secretary
Anders Teljebäck

Jens Orback
Minister responsible for coordinating gender equality policy

Leif Pagrotsky
Minister responsible for the Swedish Agency for Innovation Systems and related issues

---

IT-policy Strategy Group

Board – external members

Adm. office – part of the ministry

PERMANENT CIVIL SERVICE STAFF

Secretariats

Legal Secretariat

Budget Secretariat

Secretariat for Administration

Coordination Secretariat

Secretariat for Information and Public Relations

Secretariat for Research and Analysis

Secretariat for European and International Coordination

Divisions

Business Division

Division for Labour Market Policy

Division for State-Owned Companies

Division for Labour Law and Work Environment

Division for Information Technology, Research and Development

Division for Regional Development and Tourism

Division for Sustainable Development and Primary Industries

Division for Transport Policy

Division for Gender Equality

Division for Infrastructure

Methods

- **Working groups with members from government ministries, central and local government authorities, academia and private sector, experts, specialists**
- **Cooperation - ongoing activities**
  - internal - Government offices, central government authorities
  - external - private sector, regional and local governments, research and education, international contacts
- **Forums for dialogue**
  - roundtable discussions, seminars, hearings
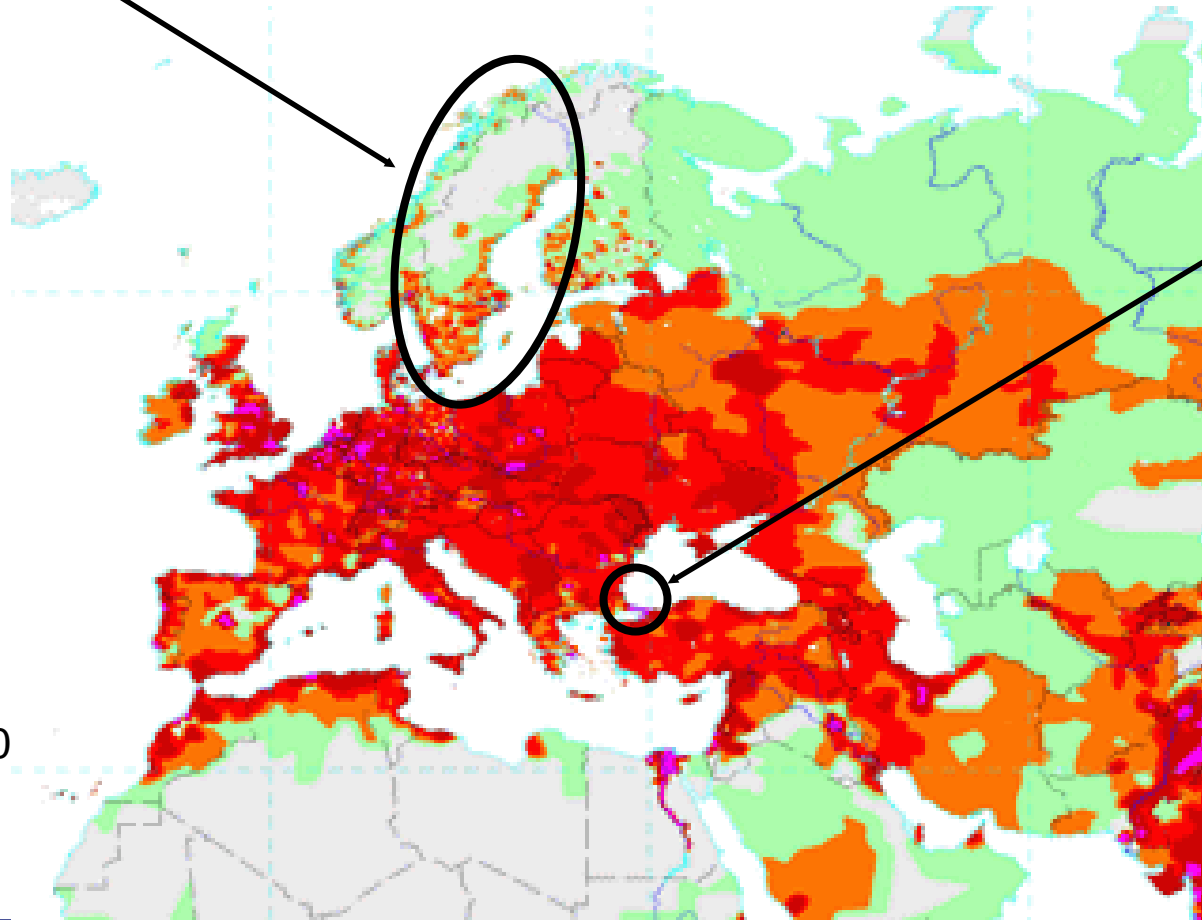 - network of more than 300 people…

Six priority areas

- **ICT Infrastructure and Broadband**
- **ICT in Schools and Learning**
- **ICT in Healthcare**
- **Economic Growth in ICT Industries**
- **ICT and Culture**
- **ICT and a Sustainable Society**

REGERINGSKANSLIET

**Government Offices
of Sweden**

Sweden – a sparsely populated area

You are here

Persons/km^2

- <2
- 2-10
- 11-40
- 41-100
- 101-500
- >500

REGERINGSKANSLIET

**Government Offices
of Sweden**

General broadband policy – since 2000

- **The political aim is that an effective and secure physical infrastructure, with high capacity, must be be available in all parts of Sweden**
  - give people possible access to interactive public services
  - accomplished mainly through market channels and
  - the government has overall responsibility for ensuring that IT infrastructure is available nationwide
  - competitive neutrality, diversity in networks and technological neutrality

REGERINGSKANSLIET

Government Offices of Sweden

General broadband policy
The broadband program 2000 to 2006

- **Infrastructure funding of 5.25 billion SEK (1,05 billion YTL):**
  - Backbone network   8%
  - Regional network   40%
  - Local network   22%
  - Tax relief for connection   20%
  - Extra funding to backbone, regional and local networks   10%
  - …and structural funds and other regional grants 0.575 billion SEK (0,115 billion YTL)

General broadband policy
Some conclusions

- **The governmental funding to broadband access is important for sparsely populated areas**

- **Local involvement and commitment in municipalities and regions is very important**

- **Increased competition through a diversity of operators**

- **Expansion takes longer time than estimated because of complexity and change in market situation**

REGERINGSKANSLIET

Government Offices of Sweden

Major challenges!

Network neutrality	**Consumer perspective, Available services**
Convergence	**Broadcast, Internet Infrastrucure**
Competition	**Infrastructure, Internet Services**
Coordination	**Local, regional and national level**
Coordination	**Private and public sector**
The digital divide	**e-inclusion**

REGERINGSKANSLIET

Government Offices
of Sweden

What is public policy?

- **The basic policy or set of policies forming the foundation of public laws, especially such policy not yet formally enunciated**
- **Public policy manifests the common sense and common conscience of the citizens as a whole that extends throughout the state and is applied to matters of public health, safety, and welfare**
- **(and more…)**

Why do Governments inject themselves in some discussions?

- **A Government feel they are responsible for some processes, like "access to public resources"**
  - To be able to make phone calls, one need a telephone number
  - Telephony is important for the economy
- **Allocation must "just work"**
- **If allocation does not work, entities will complain to the government**

Example: IP-addresses

- **Everyone can today get an IP address**
- **Policy is developed via an open process**
- **But what happens if things go bad?**
  - Is the appeal chain known, if allocation decisions or policy decisions are to be appealed? Local (LIR) or global (RIR)?
  - What happens if RIPE NCC go away?
  - What happens if bad people start work at RIPE NCC, what is the control mechanism?

Example: Domain names

- **We have ccTLDs, that are delegated**
- **Everyone can get a domain name**
- **But…**
  - If the registry is to be changed, what is the process for assigning the ccTLD to someone?
    - Note that the question is not **why** it is changed!
  - Is there a risk a policy created out of control can have impact on domain name assignment or operation for the ccTLD?

Governments must be here at RIPE

- **Questions governments ask are different than the ones we ask**
  - We say "RIPE NCC is taking care of this"
  - Governments ask "What if RIPE NCC goes away?"
- **Similar questions regarding policy**
  - What is the risk allocation has impact on competition, innovation and the ability for end users to "do what they want to do"?
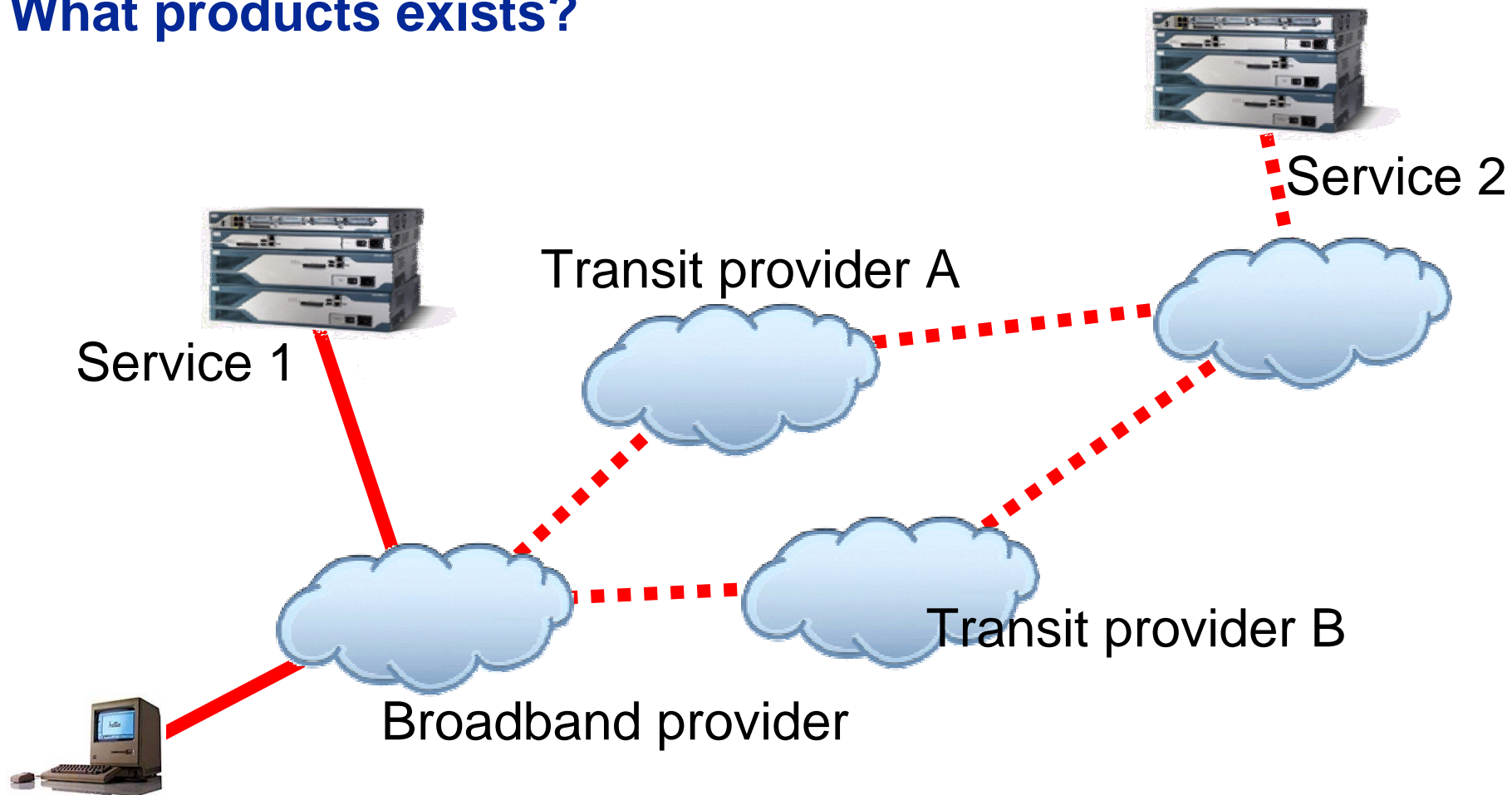
RIPE NCC Roundtable

- **RIPE NCC have held some roundtable discussions**

- **Have educated governments on what Internet and "a RIR" are**

- **More Government policy people could be here and ask questions directly, to participate in the RIPE process (that control RIPE NCC)**
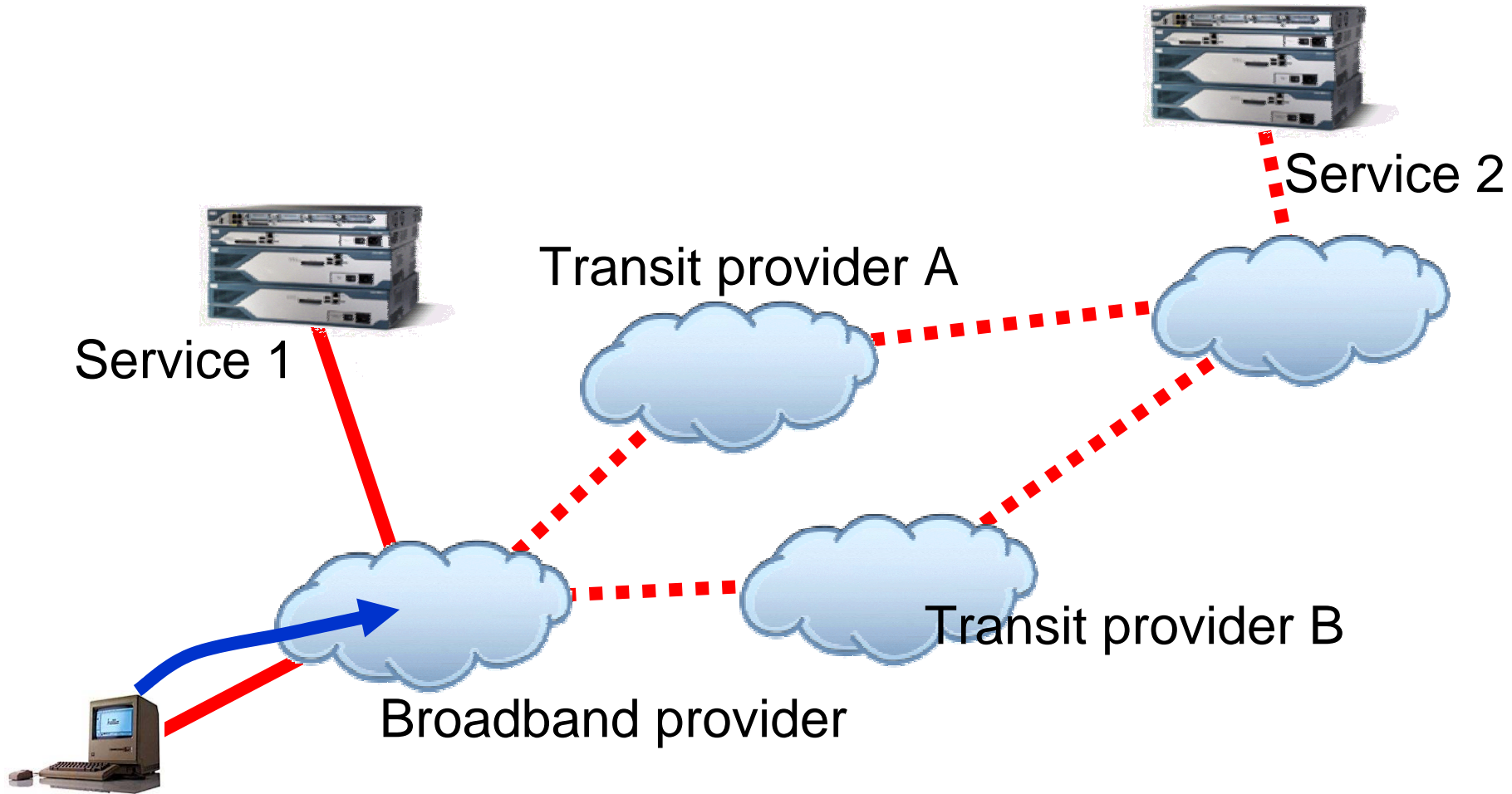
REGERINGSKANSLIET

Government Offices of Sweden

Some questions related to broadband

Broadband product of today
What products exists?

Service 2

Transit provider A

Service 1

Transit provider B

Broadband provider

1. Broadband access

Service 2

Transit provider A

Service 1

Transit provider B

Broadband provider

REGERINGSKANSLIET

Government Offices
of Sweden

2. Local services
(Broadband access required)

Service 2

Transit provider A

Service 1

Transit provider B

Broadband provider
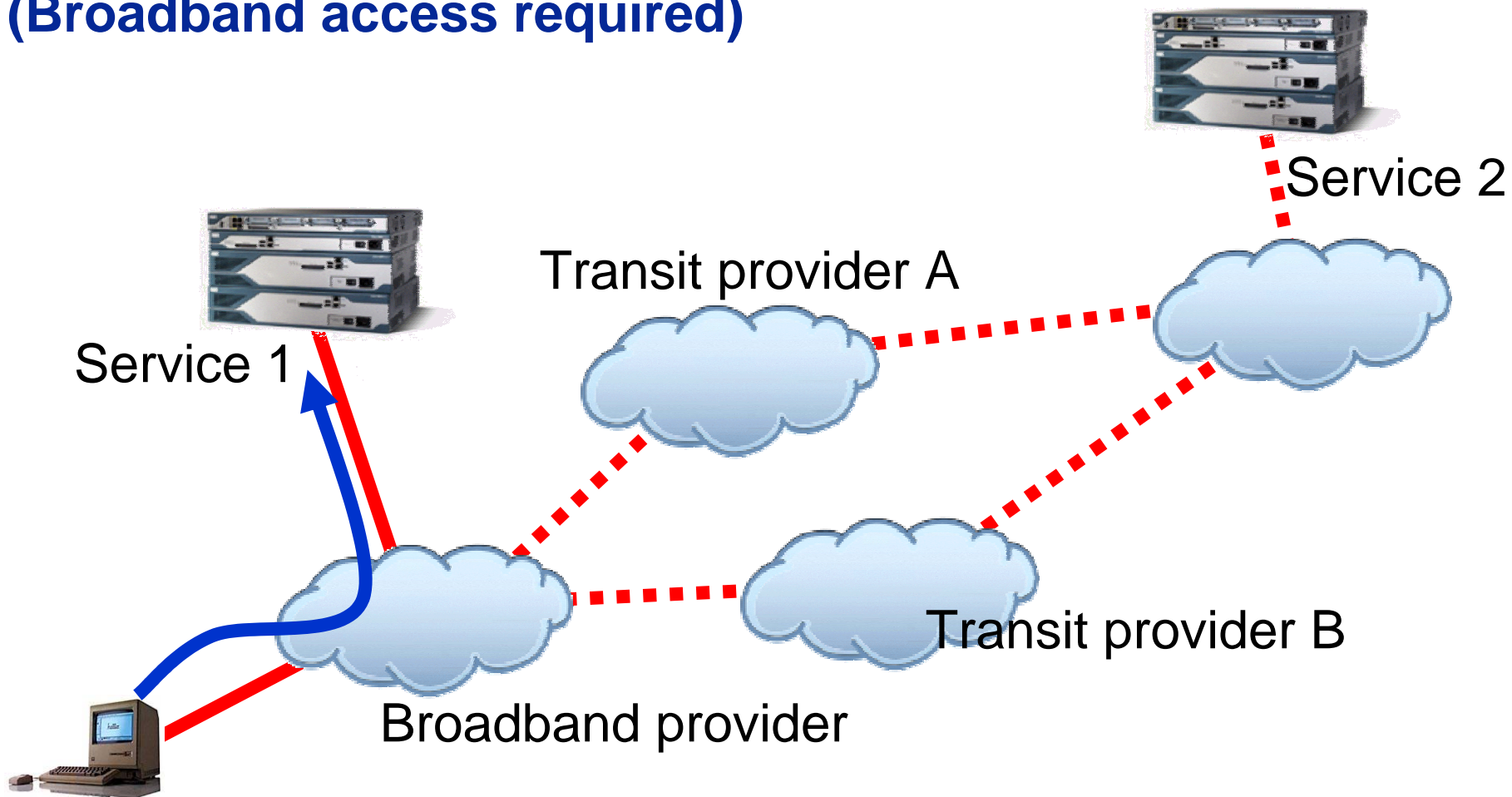
3. Internet access
(Broadband access required)

Service 2

Transit provider A

Service 1

Transit provider B

Broadband provider
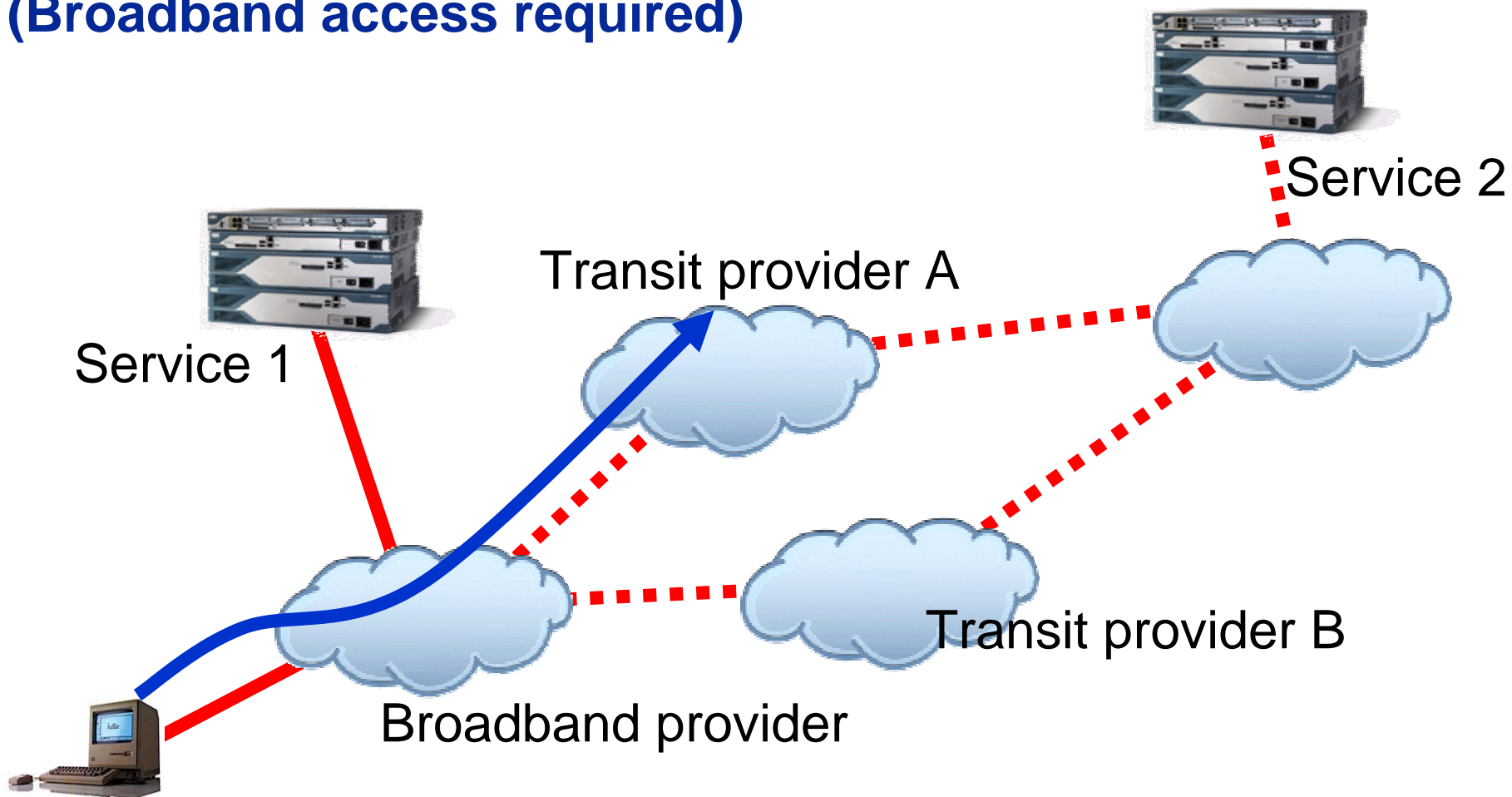
4. Non-local services
(Broadband and Internet access required)

Service 2

Transit provider A

Service 1

Transit provider B

Broadband provider
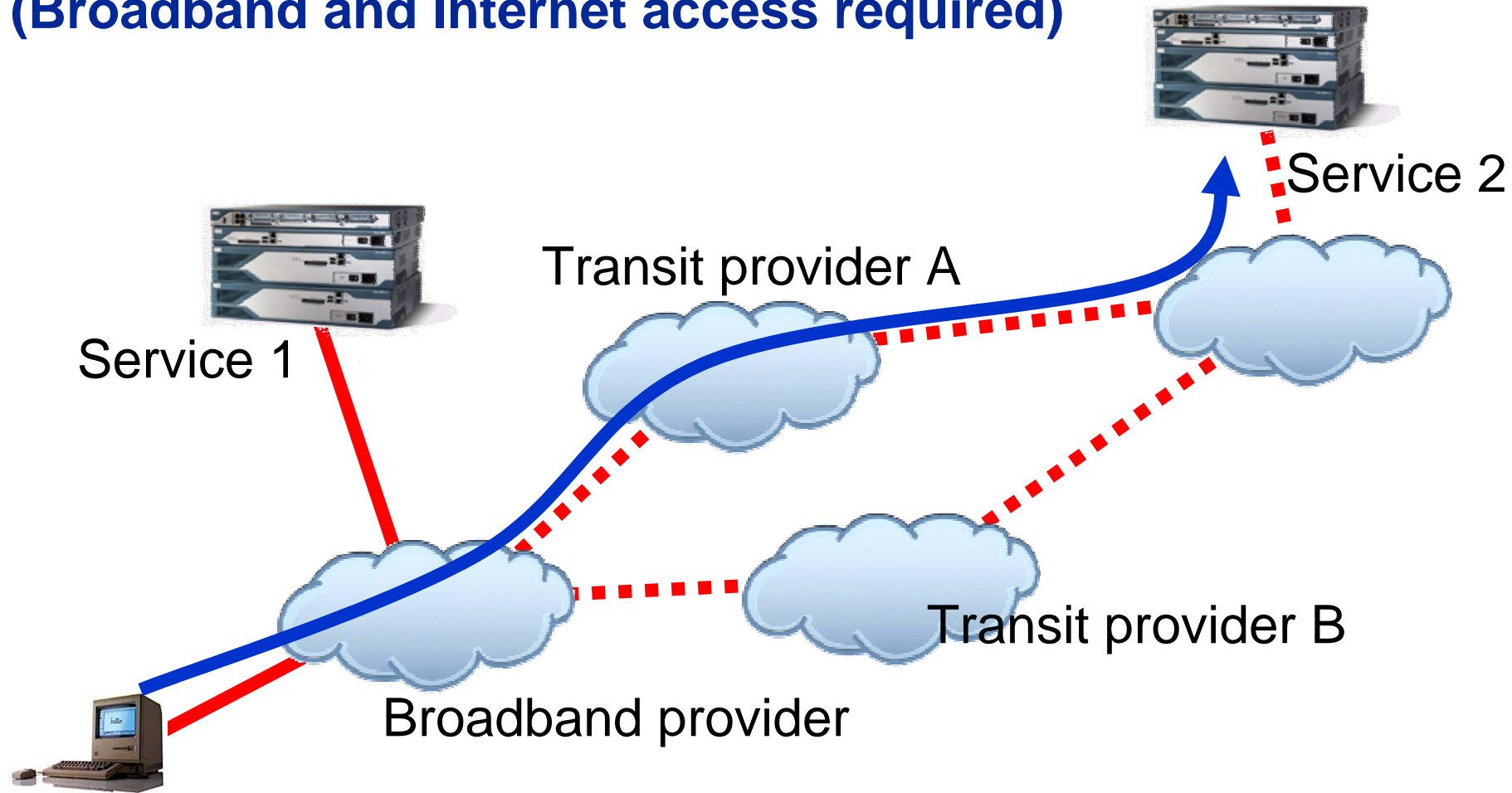
Products to choose from

1. **Broadband access**
    –   Necessary for all services

2. **Local services**
    –   Broadband access required

3. **Internet access**
    –   Necessary for non-local services

4. **Non-local services**
    –   Internet access required

This model rises a couple of questions

1. De-facto-monopoly for local broadband?

- **Will each household have more than one broadband provider to choose from?**
- **If so, do they use the same infrastructure?**
- **Is there a need for special oversight around local access?**

Broadband provider

REGERINGSKANSLIET

**Government Offices of Sweden**
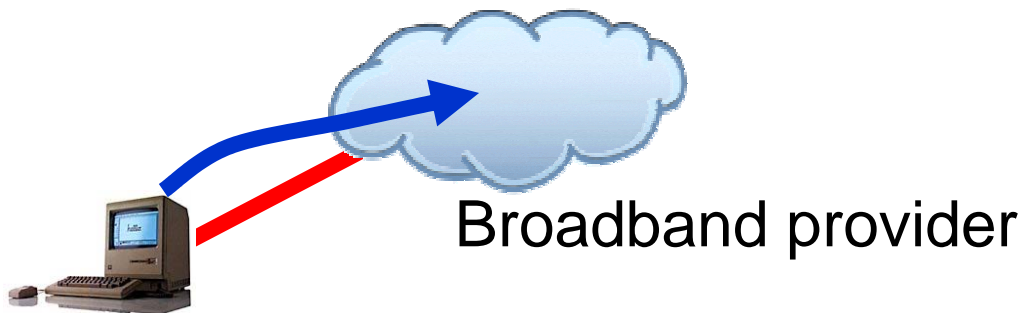
2. Competition between local services?

- **Is there competition between local services, or do the end user have (for example) only one VoIP service to choose from?**
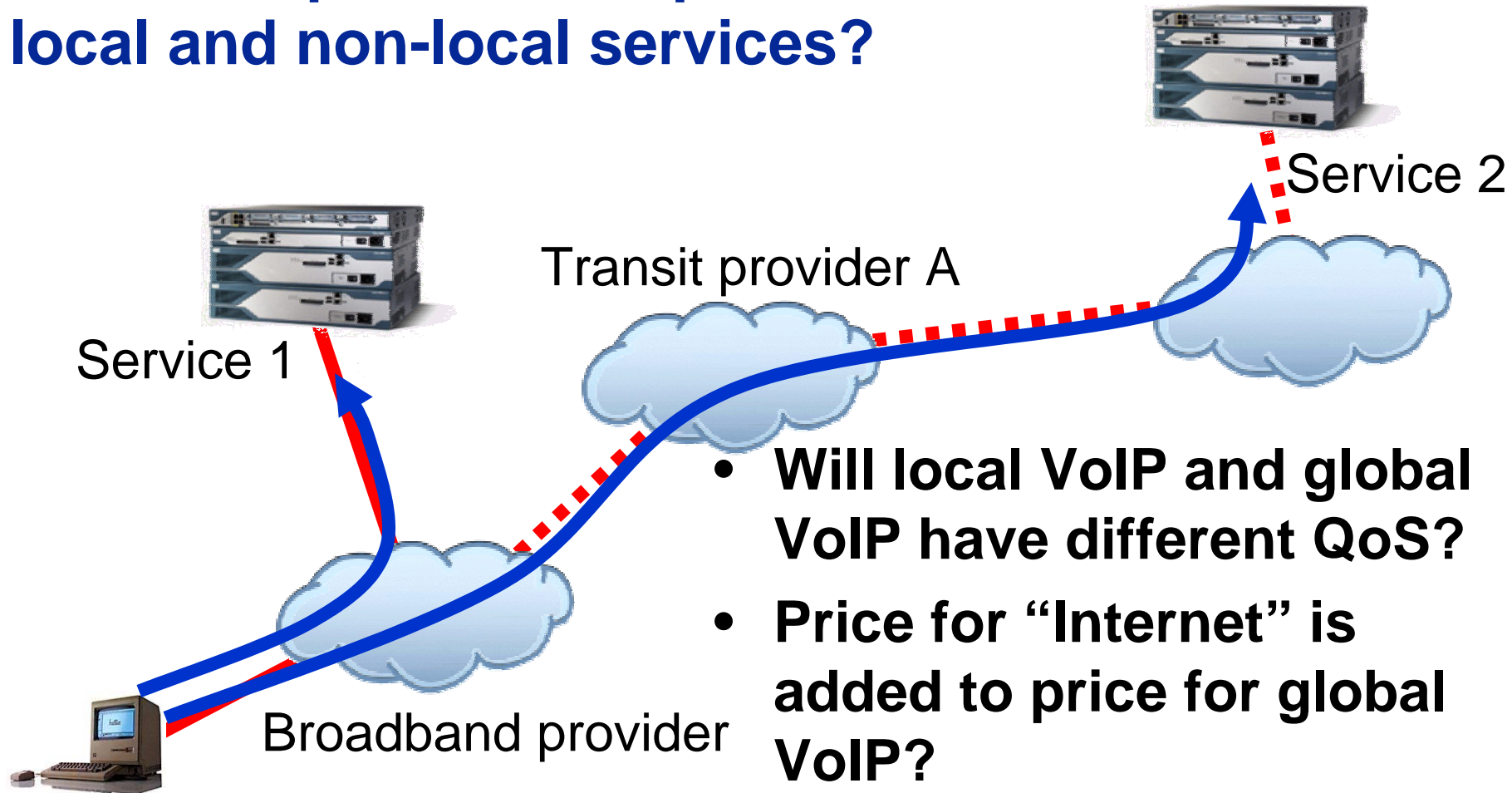
Service 1

Broadband provider
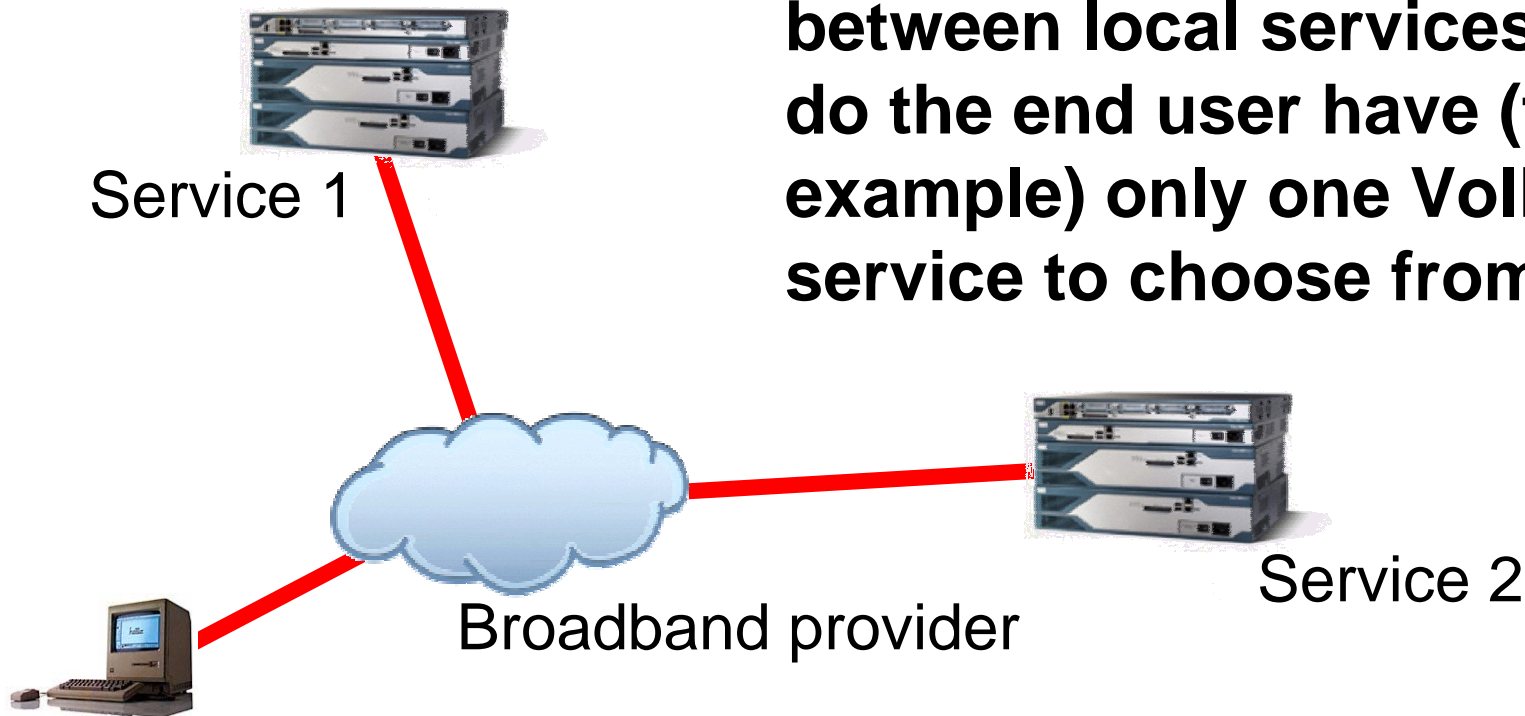
Service 2

3. Reachability for local services?

Service 1

- **If end user buy a local service, can that be used when user buy Internet access somewhere else?**

Transit provider B
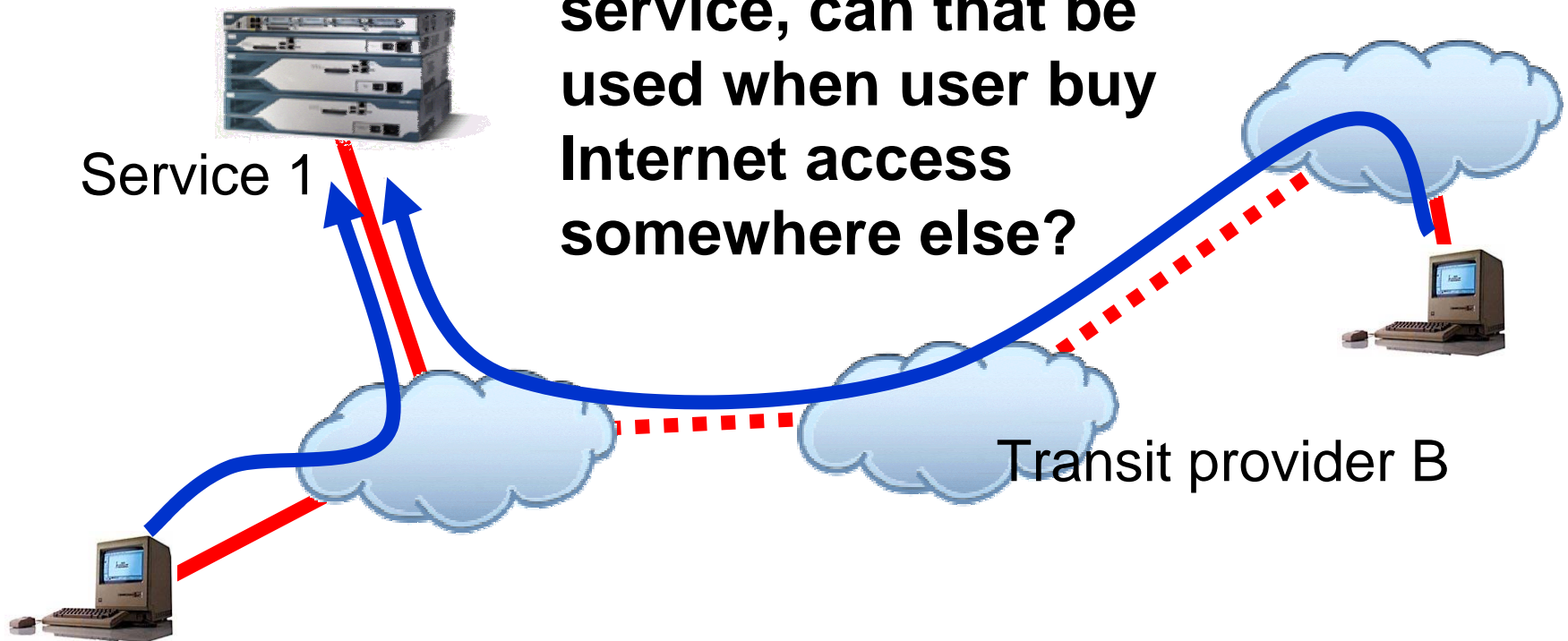
4. Price and performance of Internet access impact on competition between local and non-local services?

Service 2

Transit provider A

Service 1

- **Will local VoIP and global VoIP have different QoS?**
- **Price for "Internet" is added to price for global VoIP?**

Broadband provider

5. Deployment of public e-services?

- **Can end users reach public e-services without buying Internet access?**

- **What should the e-service buy and build, to increase chance of reachability to end-users?**
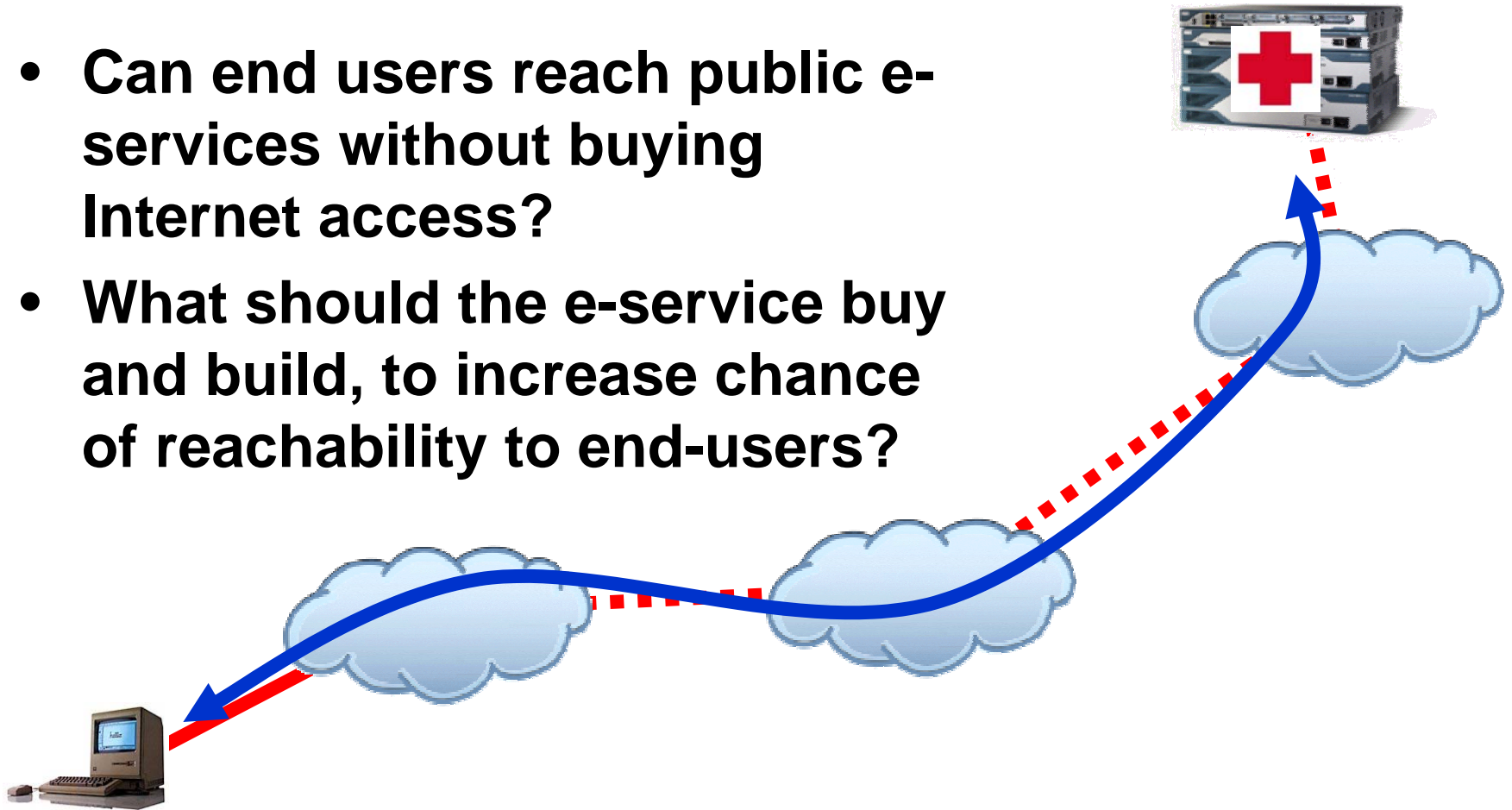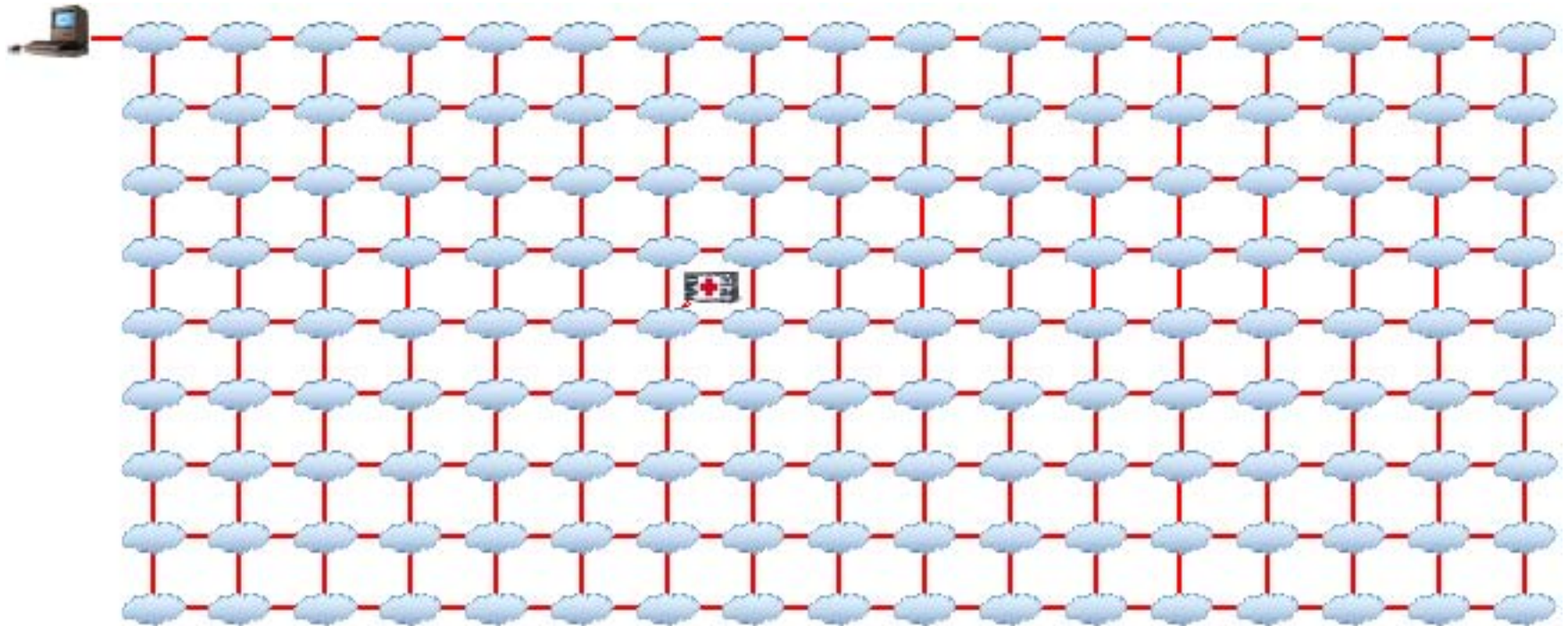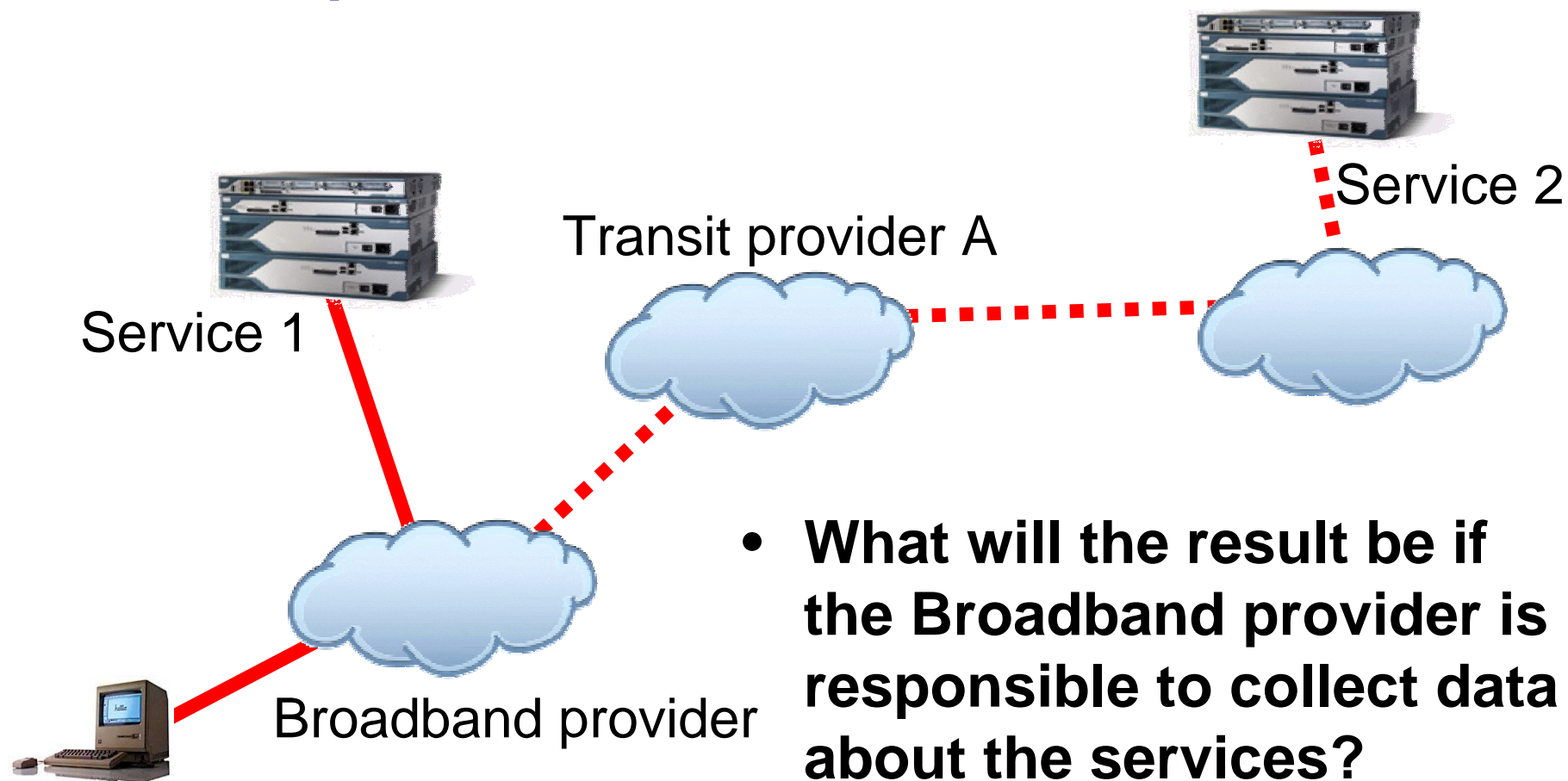
5. Must the e-service have connectivity/agreement with every network?

REGERINGSKANSLIET

Government Offices of Sweden

5. Or is it enough to get one connection?

6. For issues like data retention and wiretap, who is responsible to collect what data?

Service 2

Transit provider A

Service 1

- **What will the result be if the Broadband provider is responsible to collect data about the services?**

Broadband provider

REGERINGSKANSLIET

Government Offices of Sweden

Statements…

The ultimate goal is that the user, independent of location and time, must be able to access the services she or he wishes, without being hindered by blocks created by business, technical, or regulative reasons.

This vision of the user's ubiquitous access requires convergence when looking at services, equipment and networks.

The impression, though, is that this convergence process is slow, and is hindered by traditional business models.

The main purpose of the review of the telecom regulation is to ensure the existence of effective and stable competition in all sectors of the market.

Regulation should be "future-proof" and predictable, and strive towards a high degree of harmonization and consumer protection, ensure security, privacy and trust.

The Swedish Government has indicated that these issues should be examined. We have also highlighted these issues in connection with the review of the electronic communications directive.

Links:

- **Swedish IT Policy**
  - http://www.sweden.gov.se/sb/d/2156/a/20015
- **IT Policy and Strategy Group**
  - http://www.sweden.gov.se/sb/d/2156/a/22411
- **Summary of the Government Bill 2004/05:175, From an IT policy for society to a policy for the IT society**
  - http://www.sweden.gov.se/sb/d/2025/a/51790
- **Development of IT infrastructure - action to increase access throughout Sweden**
  - http://www.sweden.gov.se/sb/d/2025/a/18450
- **Maria Häll <maria.hall@industry.ministry.se>**
- **Patrik Fältström <paf@cisco.com>**