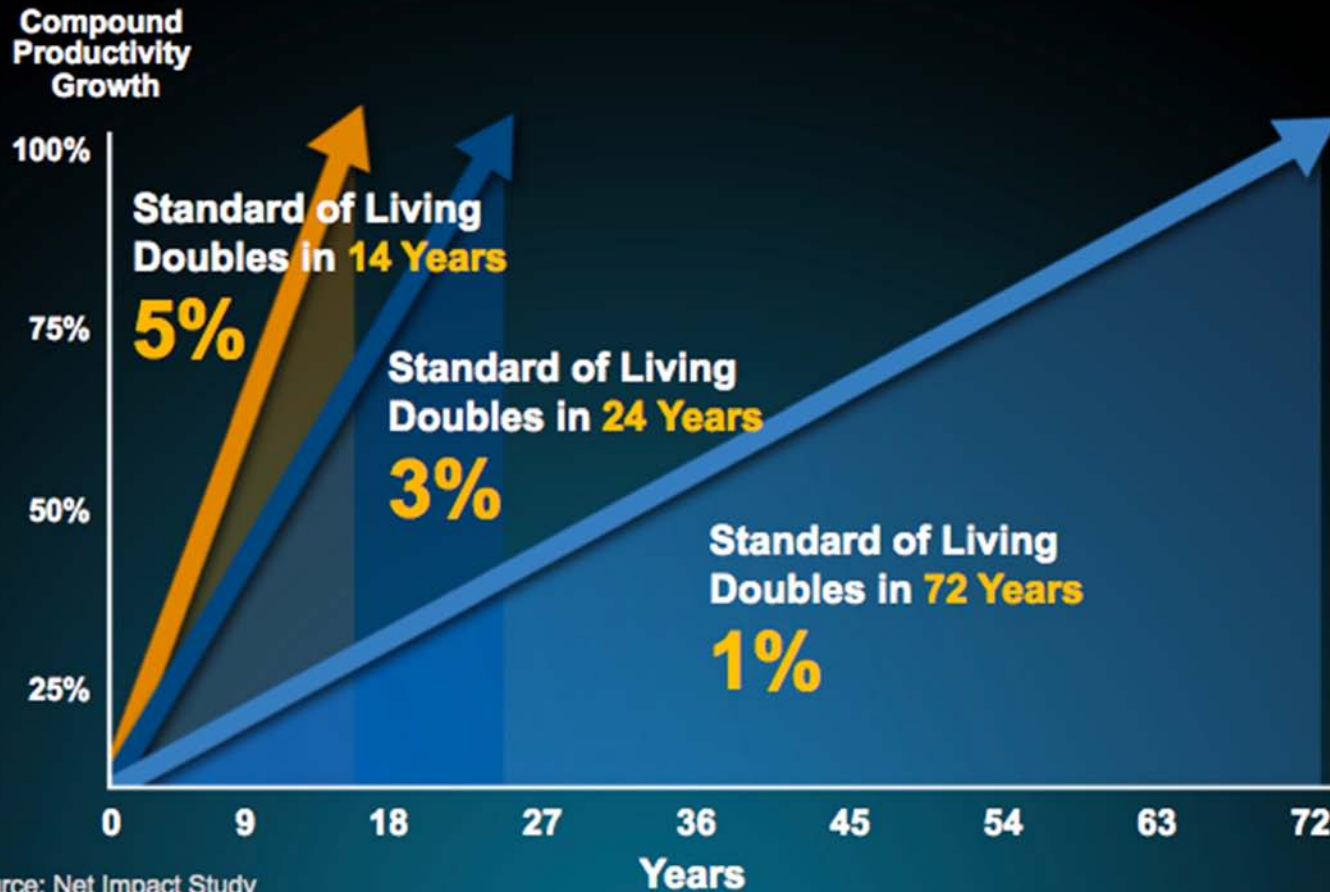


A night photograph of a city street. In the foreground, a glowing fiber optic light sculpture, resembling a stylized tree or a cluster of fibers, emits a warm yellow and orange light. The background shows a city street with a building and a street sign. The overall scene is dimly lit, with the primary light source being the fiber optic sculpture.

*“fiber to all”*

# Productivity Drives Standard of Living



Pepper-06-2008-2 © 2006 Cisco Systems, Inc. All rights reserved.



# Open Services Exchange

## Jonas “Birger” Birgersson – commercial history of broadband

1993:	1995:	1998:	1999:
<ul style="list-style-type: none"><li>- Telia</li><li>- Strategist</li><li>- Telia new infrastructure project</li><li>- From think tank to national reformation of telecom</li><li>- Triggered national role out of neutral fiber (STOKAB 1994)</li></ul>	<ul style="list-style-type: none"><li>- Framfab</li><li>- Founder &amp; CEO</li><li>- Investors; Rausing &amp; Kamprad</li><li>- No 1 Professional Internet Marketing &amp; Design firm</li><li>- Largest out side of US, 3:e largest in the World</li><li>- From 0 to + 3000 employees</li><li>- Customers; Volvo, IKEA, Nike, Ericsson</li><li>- Market cap exceeding 5 billion USD</li></ul>	<ul style="list-style-type: none"><li>- Bredbandsbolaget</li><li>- Founder &amp; Chairman</li><li>- Investors; Rausing, Wallenbergs, Intel, Carlyle group</li><li>- Partners; Cisco (Tech + Financing of 500 M USD)</li><li>- Starting point for modern Broadband</li><li>- Worlds first; 10/10, 100 / 100, 3P (IPTV from Sidney Olympics 2000)</li><li>- Operations in SE, NO, DK, Holland + Italy (Fastweb)</li><li>- Built close to 500k FTTB lines in just SE</li><li>- Took 27% of market in SE</li><li>- Sold to Telenor in 2005 for 850 M USD</li></ul>	<ul style="list-style-type: none"><li>- ViaEuropa</li><li>- Investor (advisor)</li><li>- Chairman SA</li><li>- Worlds first OSEO</li><li>- Worlds first 1000 / 1000 (Dec 2004), built fastest wireless network (WiFi 802:11n up to 540 Mbps = 75x faster than standard 3G)</li><li>- Run 27 OSEO Networks in 4 countries with 3P+ Service based on the leading VSP Eco-system</li><li>- More than 550k users handled by a staff less then 50 people</li></ul>

# Open Services Exchange

Jonas “Birger” Birgersson – commercial history of broadband

**TIME**

“One of Europe’s 50  
Hottest Tech Firms”

6/2000

**RED HERRING**

“B2, an early  
example of how  
these technologies  
could transform the  
Internet”

2/2000

**THE WALL STREET JOURNAL**  
EUROPE

Cisco and B2...  
”Beating traditional  
telecom and cable  
providers to the  
punch on  
broadband”

11/1999

**FINANCIAL TIMES**

“Local video shop  
faces its biggest  
challenger yet”

5/2000

**WIRED**

Ethernet Unbound  
”Jonas Birgersson  
is one reason why  
Sweden is kicking  
broadband butt”

7/2000

**FORTUNE**

“You Think It's DSL  
vs. Cable? Guess  
Again”

10/2000

# Open Services Exchange

## Jonas “Birger” Birgersson – awards (selection)

### Non Government Org:

- World Economic Forum
- Global Leader of Tomorrow (2000)
- Tech Pioneer (2000)
- Ernst & Young
- The Young Outstanding Person of the Year (2000)





# Open Services Exchange for Belarus

## Jonas “Birger” Birgersson – Lund (my environment)

### Great place for great ideas:

- Largest research university in Scandinavia
- 42 000 students (where of 4500 are PhD)
- Ideon Science Park is the oldest and largest of its kind in Scandinavia
- World class innovation (including, pacemaker, artificial kidney, GSM & Bluetooth)
- World class entrepreneurs (Rausing of Tetrapak, Ingvar Kamprad of IKEA)
- Maxlab IV – USD 380 million upgrade for synchrotron radiation source
- ESS – USD 1,8 billion investment in neutron source
- Gigabit broadband to 25% of households + 0,5 Gbps WiFi from ViaEuropa



# Open Services Exchange

Jonas “Birger” Birgersson – advisory work

## Governments:

- Sweden
- Norway
- Denmark
- France
- Australia
- Singapore
- USA
- Switzerland

## Universities:

- Lund
- Berkley

## Companies:


- Telia
- BT
- Google
- FON
- Ericsson
- Volvo
- IKEA
- Nike






# Open Services Exchange

## Jonas "Birger" Birgersson – effect?




COMMITTED TO IMPROVING THE STATE OF THE WORLD

SEARCH 



COMMUNITIESEVENTSINITIATIVESMEDIABOUT USKNOWLEDGE NAVIGATORLOG IN

Home > Initiatives > Global Competitiveness > Global Information Technology Report




### Global Competitiveness

- Global Competitiveness Report
- Global Information Technology Report
  - Past Reports
- Global Enabling Trade Report
- Travel & Tourism Competitiveness Report
- Gender Gap Report
- Financial Development Report
- Africa Competitiveness Report
- Arab World Competitiveness Report
- Latin America, Private Investment in Infrastructure
- Lisbon Review
- Country Studies
- Partner Institutes
- FAQs
- Buy online

[Return](#)

## The Global Information Technology Report 2009-2010

Launched 25 March 2010



**The report highlights the key role of ICT as an enabler of a more economically, environmentally and socially sustainable world**

Sweden tops the rankings of The Global Information Technology Report 2009-2010, released today for the ninth consecutive year by the World Economic Forum. Sweden is followed by Singapore and Denmark, which was in the number one position for the last three years. Switzerland (4), the United States (5) and the other Nordic countries together with the Canada, Hong Kong and the Netherlands complete the top 10.

With an extensive coverage of 133 economies worldwide, the report remains the world's most comprehensive and authoritative international assessment of the impact of ICT on the development process and the competitiveness of nations.

The report is produced by the World Economic Forum in cooperation with INSEAD, the leading international business school, within the framework of the World Economic Forum's Global Competitiveness Network and the Industry Partnership Programme for Information Technology and Telecommunications Industries.

[View the Interactive Report >](#) [Browse the Report >](#)

### Rankings 2009-2010 Top Ten

>> [Rankings in full](#)

Rank	Country	Score
1	<a href="#">Sweden</a>	5.65
2	<a href="#">Singapore</a>	5.64
3	<a href="#">Denmark</a>	5.54
4	<a href="#">Switzerland</a>	5.48
5	<a href="#">USA</a>	5.46
6	<a href="#">Finland</a>	5.44
7	<a href="#">Canada</a>	5.36
8	<a href="#">Hong Kong</a>	5.33
9	<a href="#">Netherlands</a>	5.32
10	<a href="#">Norway</a>	5.22

### Related Links

- [News Release](#)
- [Report Highlights](#)
- [Download the entire Report](#)

### Media Coverage


Coming soon

# Open Services Exchange


Jonas “Birger” Birgersson – global interest

**BusinessWeek**

[Register](#) | [Sign In](#)

 **WINNER**  
2008 National Magazine Award


[Current Issue](#)  
**4 Trial Issues**  
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[Europe Home](#) [Autos](#) [Companies](#) [Economy](#) [Energy](#) [Innovation](#) [Investing](#) [Europe Insight Blog](#)

## Europe

  
GETTY IMAGES

### TOP STORIES

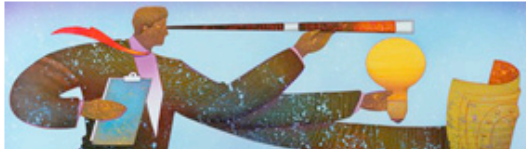
#### Sweden's Open Network Pioneer

ViaEuropa Chairman Jonas Birgersson says his open model offers consumers low prices and freedom of choice—and it could work in the U.S.

#### Energy Giants Escape Forced Breakup

At a June 6 meeting, EC ministers decide to compromise. Countries may now choose one of three models to unbundle energy interests

#### COMPANY INSIGHT CENTER beta



[Company Lookup](#)

Dig into data on more than 350,000 companies—public and private—worldwide. Research over a million execs: what they make, how they intersect.

▶ **MAN AG**

<b>MANG.DE</b>	<b>85.61</b>	<b>-1.17</b>	<b>-1.35%</b>
----------------	--------------	--------------	---------------

[Charts](#) | [Financials](#) | [People](#) | [Earnings](#) | [News](#)

# Open Services Exchange

Jonas “Birger” Birgersson – global interest



Insights from Googlers into our products, technology, and the Google culture.

## Think big with a gig: Our experimental fiber network

2/10/2010 08:00:00 AM

Imagine sitting in a rural health clinic, streaming three-dimensional medical imaging over the web and discussing a unique condition with a specialist in New York. Or downloading a high-definition, full-length feature film in less than five minutes. Or collaborating with classmates around the world while watching live 3-D video of a university lecture. Universal, ultra high-speed Internet access will make all this and more possible. [We've urged](#) the FCC to look at new and creative ways to get there in its [National Broadband Plan](#) – and today we're announcing an experiment of our own.

We're planning to build and test ultra high-speed broadband networks in a small number of trial locations across the United States. We'll deliver Internet speeds more than 100 times faster than what most Americans have access to today with 1 gigabit per second, fiber-to-the-home connections. We plan to offer service at a competitive price to at least 50,000 and potentially up to 500,000 people.

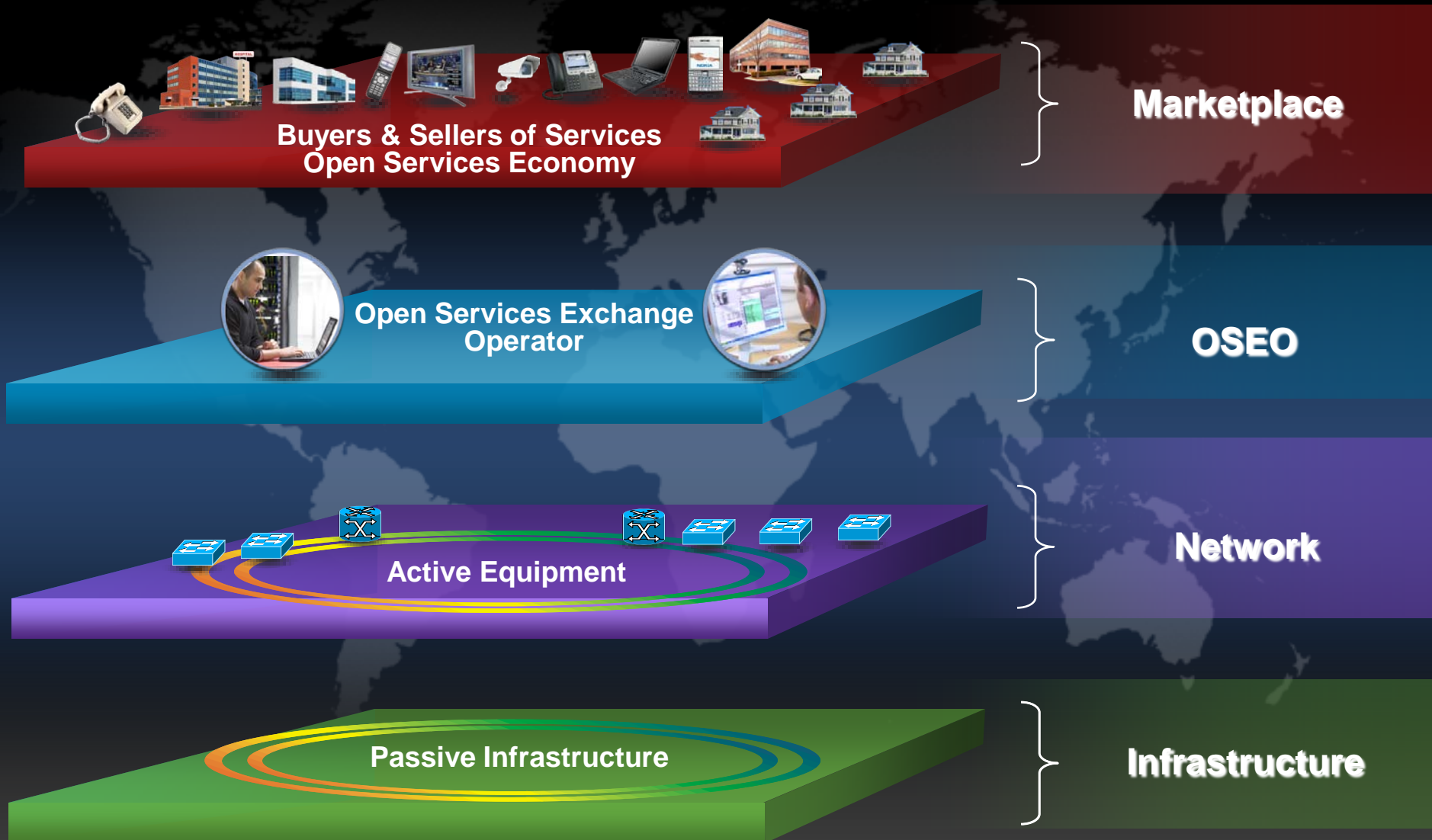
Our goal is to experiment with new ways to help make Internet access better and faster for everyone. Here are some specific things that we have in mind:

- **Next generation apps:** We want to see what developers and users can do with ultra high-speeds, whether it's creating new bandwidth-intensive "killer apps" and services, or other uses we can't yet imagine.
- **New deployment techniques:** We'll test new ways to build fiber networks, and to help inform and support deployments elsewhere, we'll share key lessons learned with the world.
- **Openness and choice:** We'll operate an "open access" network, giving users the choice of multiple service providers. And consistent with our [past advocacy](#), we'll manage our network in an open, non-discriminatory and transparent way.



# The Open Services Exchange Model

OSEO – combining market dynamic & natural monopoly



# Scandinavian experience of building open fiber networks

## Example STOKAB – owned by City of Stockholm - InfraCorp

### 1994:

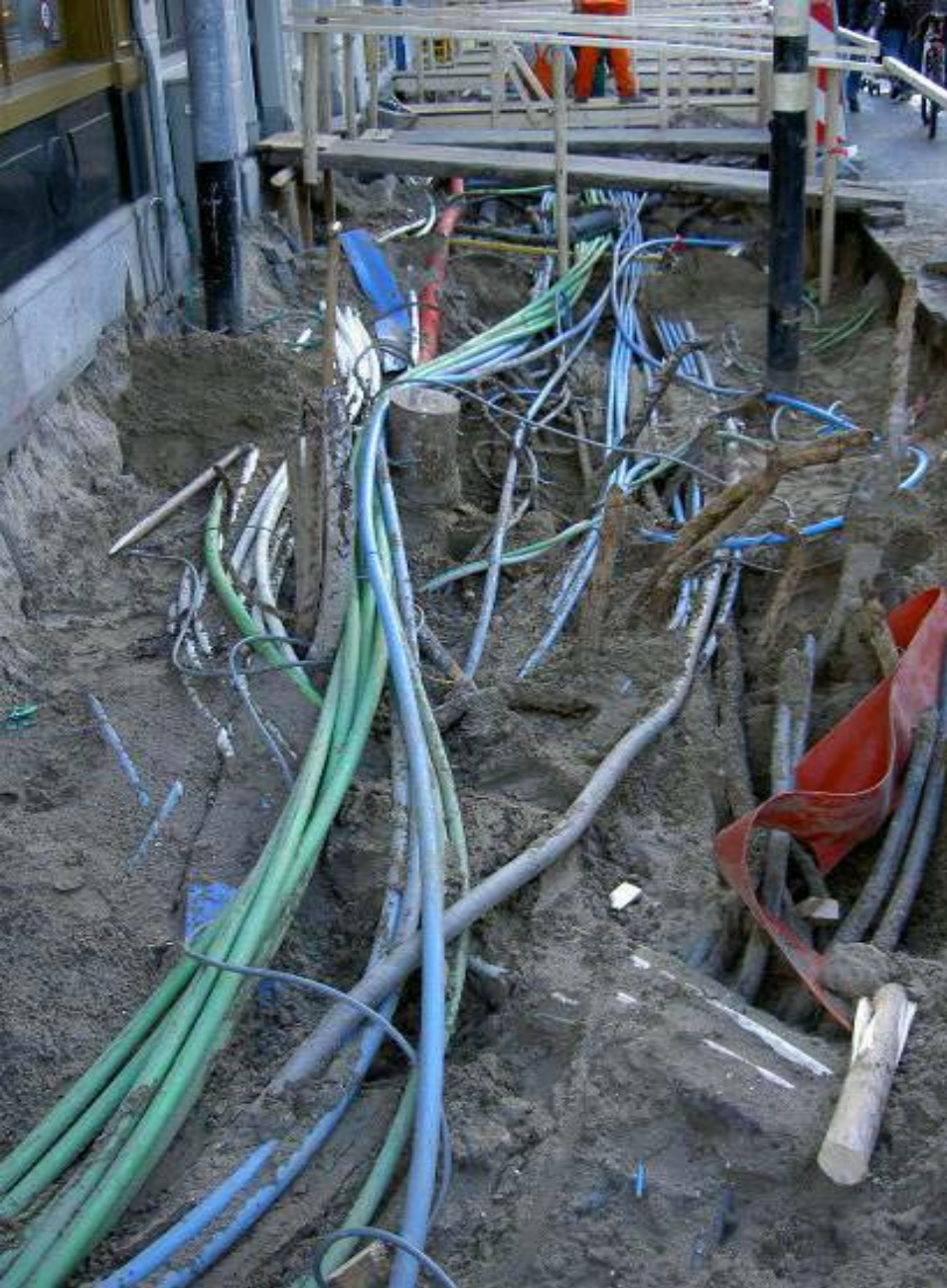
- City of Stockholm
- Transferred infrastructure (fiber) from different organization that the City controlled
- First “InfraCorp” company
- This InfraCorp to build and own all fiber infrastructure
- Strictly neutral on the market (remember that the market is fully liberalized)
- All parties accepted this concept (because of strict neutrality)
- More that 1,200,000 km of fiber
- More than 5,500 km of cable
- Profit margin last year was 30%



### Rest of Sweden:

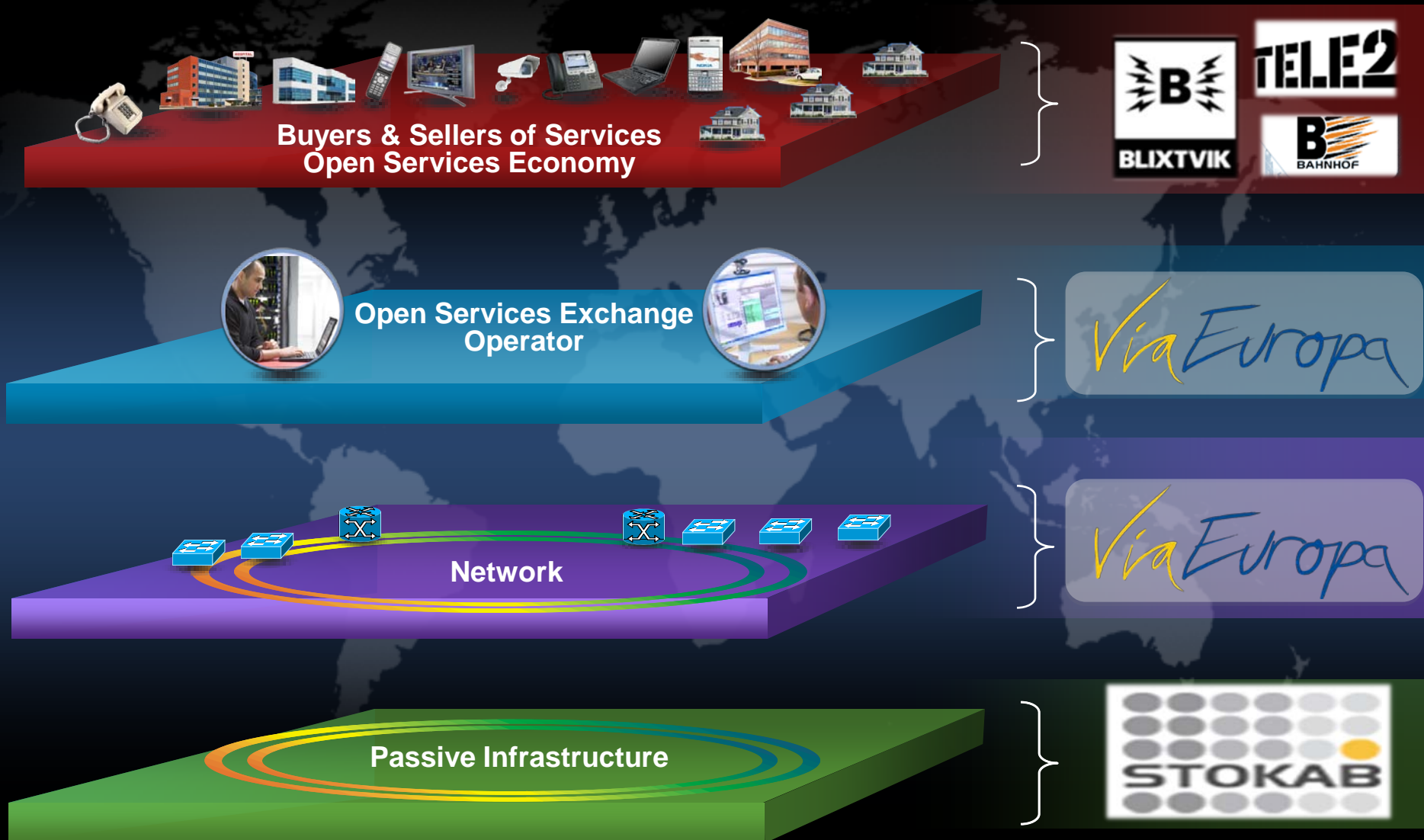
- More then 200 other local InfraCorps





# The Open Services Exchange Model

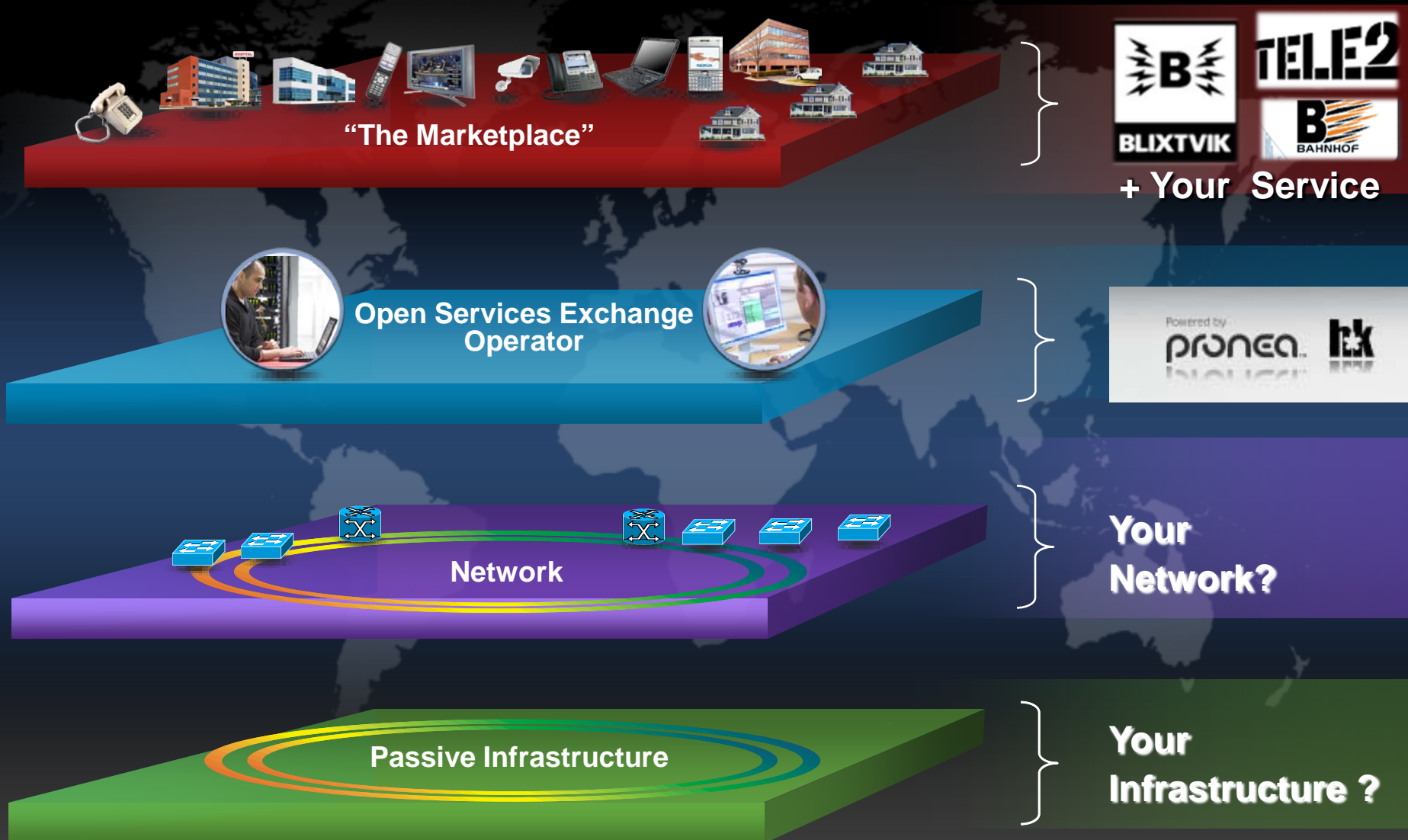
## HSEF 1999 - 2010





# The Open Services Exchange Model

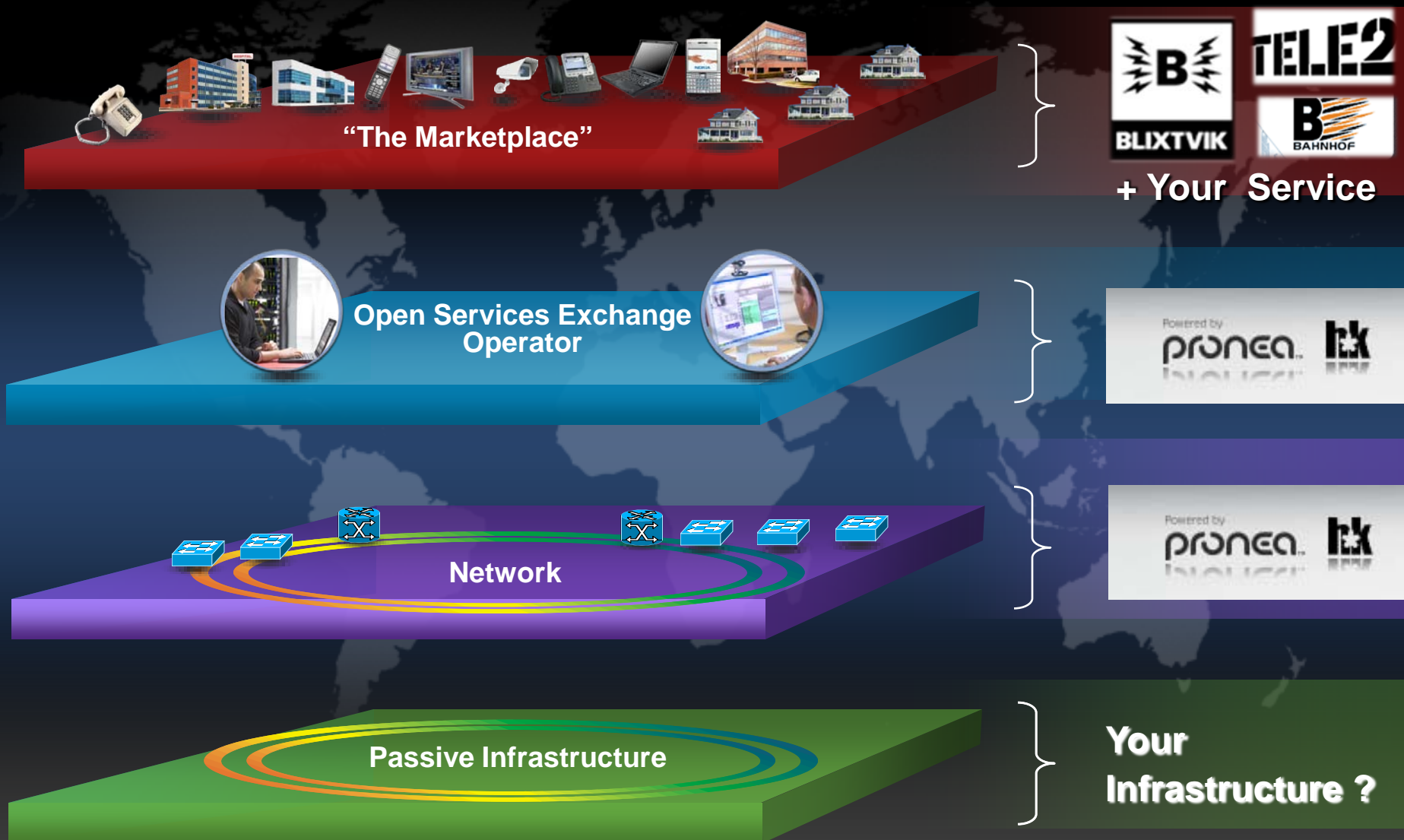
Pronea 2008 - 2010





# The Open Services Exchange Model

Pronea 2008 - 2010







## Med Bynett får du lynraskt Internett:

- Like raskt ved både henting og sending
- Raskere nettbank
- Jobb mer effektivt hjemme
- Stabilt og sikkert
- Perfekt ved flerbrukere
- Stort utvalg i hastigheter
- Markedets beste?

Til hovedsiden

Digital TV

Internett

Telefoni

Bestill / meld interesse



Om Bynett



Mer om Digital TV



Video On Demand



Kort om HDTV

## Hurtigvalg

- Fordeler med Bynett
- Bynett Speedometer
- Kontakt oss



## Digital-TV

-Mange kanaler og stor valgfrihet!

### Noen fordeler:

- Ekte Digital TV
- Stor valgfrihet
- Digitalt signal
- Perfekt for flatskjermer
- Video On Demand
- Mange HD-kanaler

Til hovedsiden

Digital TV

Internett

Telefoni

Bestill / meld interesse



Om Bynett



Mer om Digital TV



Video On Demand



Kort om HDTV

### Hurtigvalg

- ▶ Fordeler med Bynett
- ▶ Bynett Speedometer
- ▶ Kontakt oss



## Ring billig!

Vi har løsningene som holder løftene!

- Lave månedspriser
- Lave ringepriser
- Prioriterte linjer
- Behold ditt gamle tlf.nr.
- Enkelt å ta i bruk
- Meget høy kvalitet
- Mulighet for flere linjer

\* Gjelder ikke ISDN-utstyr  
Kunden velger selv om det gamle telefonnr. skal beholdes

[Til hovedsiden](#)

[Digital TV](#)

[Internett](#)

[Telefoni](#)

[Bestill / meld interesse](#)



[Om Bynett](#)



[Mer om Digital TV](#)



[Video On Demand](#)



[Kort om HDTV](#)

### Hurtigvalg

- ▶ Fordeler med Bynett
- ▶ Bynett Speedometer
- ▶ Kontakt oss



## Noen fordeler:

- Åpent nett
- Valgfrihet
- Lave priser
- Høy kvalitet
- Stabilitet
- Tilpasset deg

På Bynett er DU sjefen!  
Det betyr at du kan  
velge det beste tilbudet  
til enhver tid.

Til hovedsiden

Digital TV

Internett

Telefoni

Bestill / meld interesse



Om Bynett



Mer om Digital TV



Video On Demand



Kort om HDTV

## Hurtigvalg

- Fordeler med Bynett
- Bynett Speedometer
- Kontakt oss

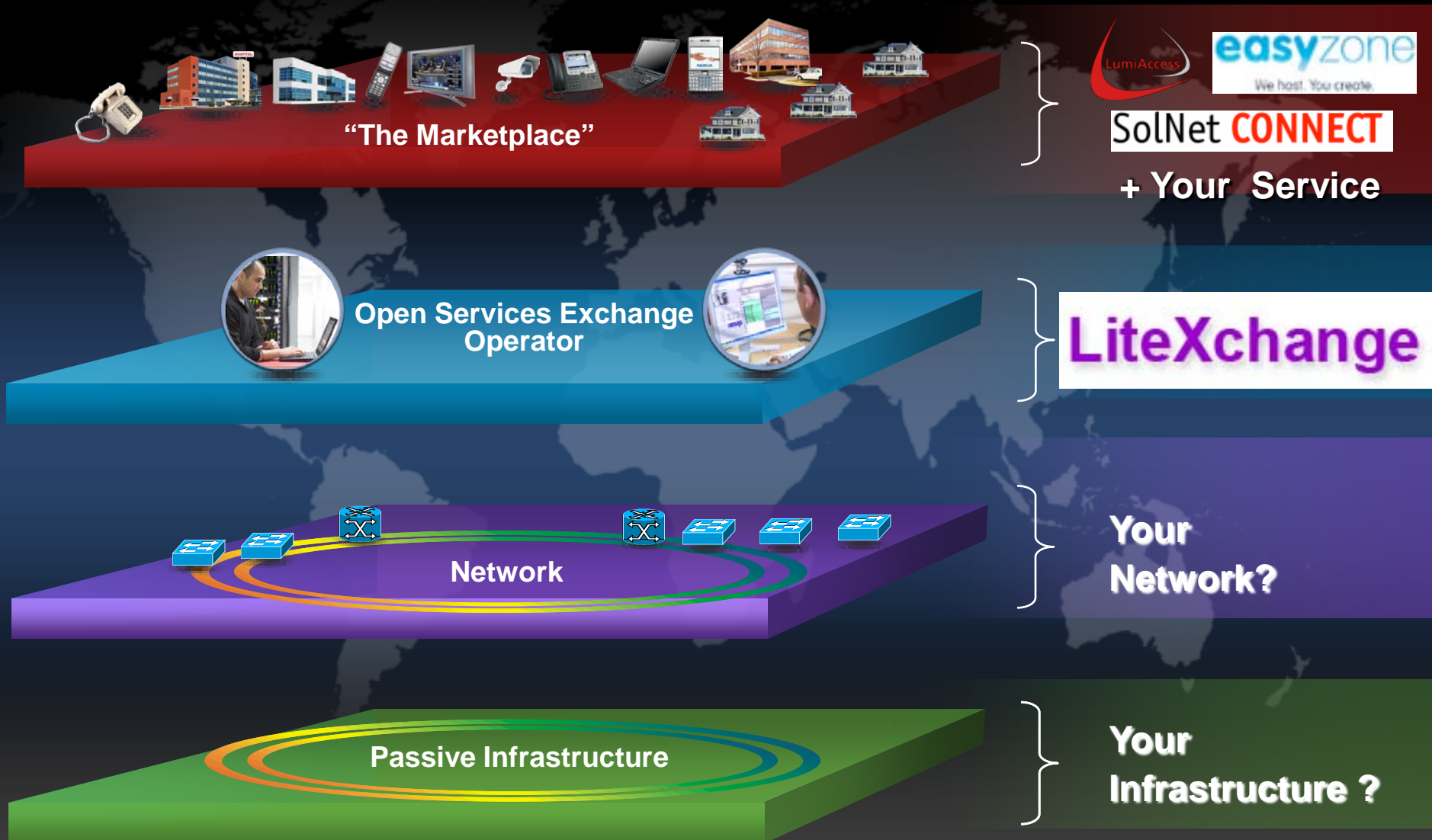






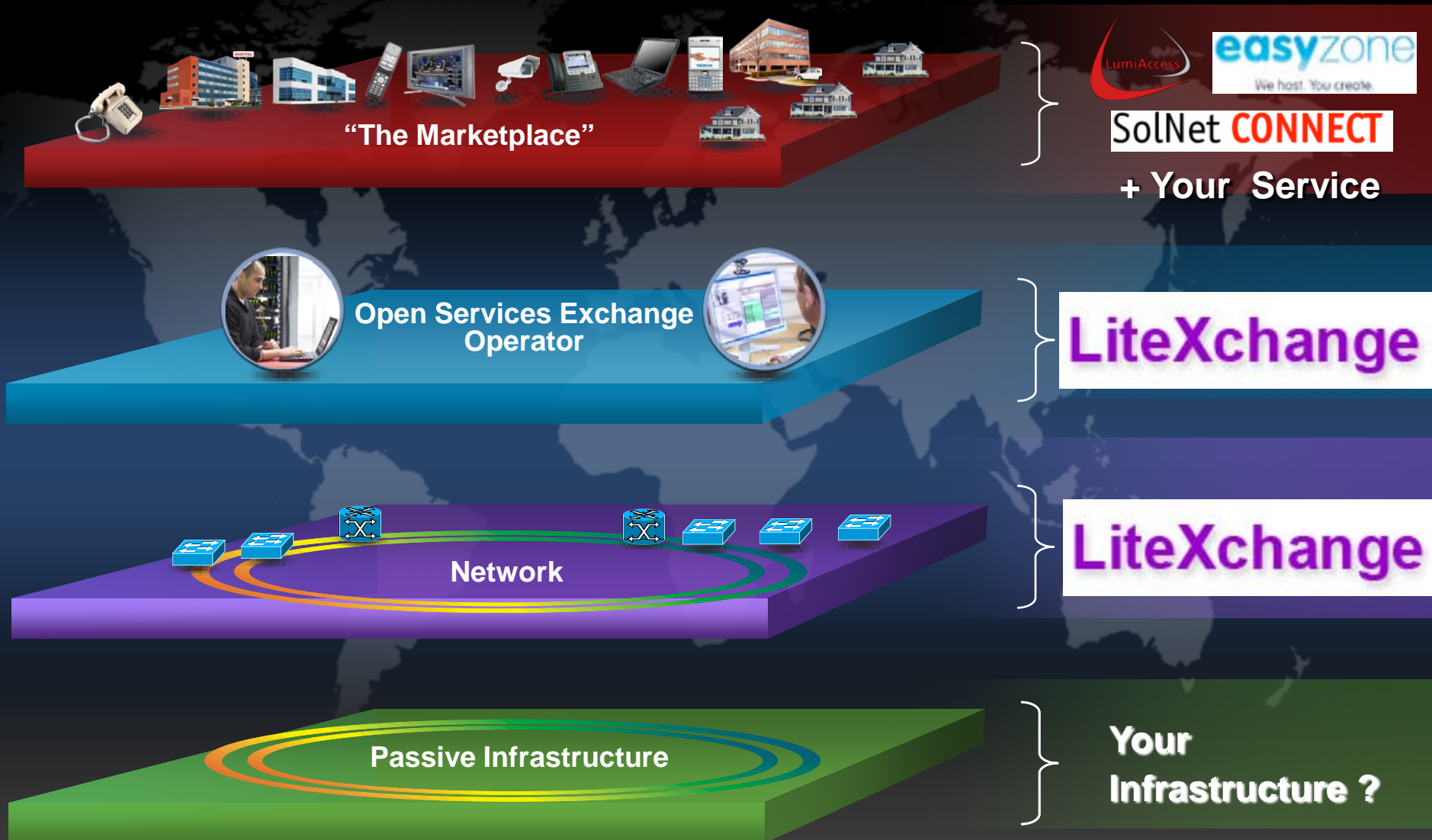
# The Open Services Exchange Model

Litecom 2009 - 2010



# The Open Services Exchange Model

Litecom 2009 - 2010







**KRISTIANSTAD  
STADSNÄT**



**BREDBAND**



**TELEFON**

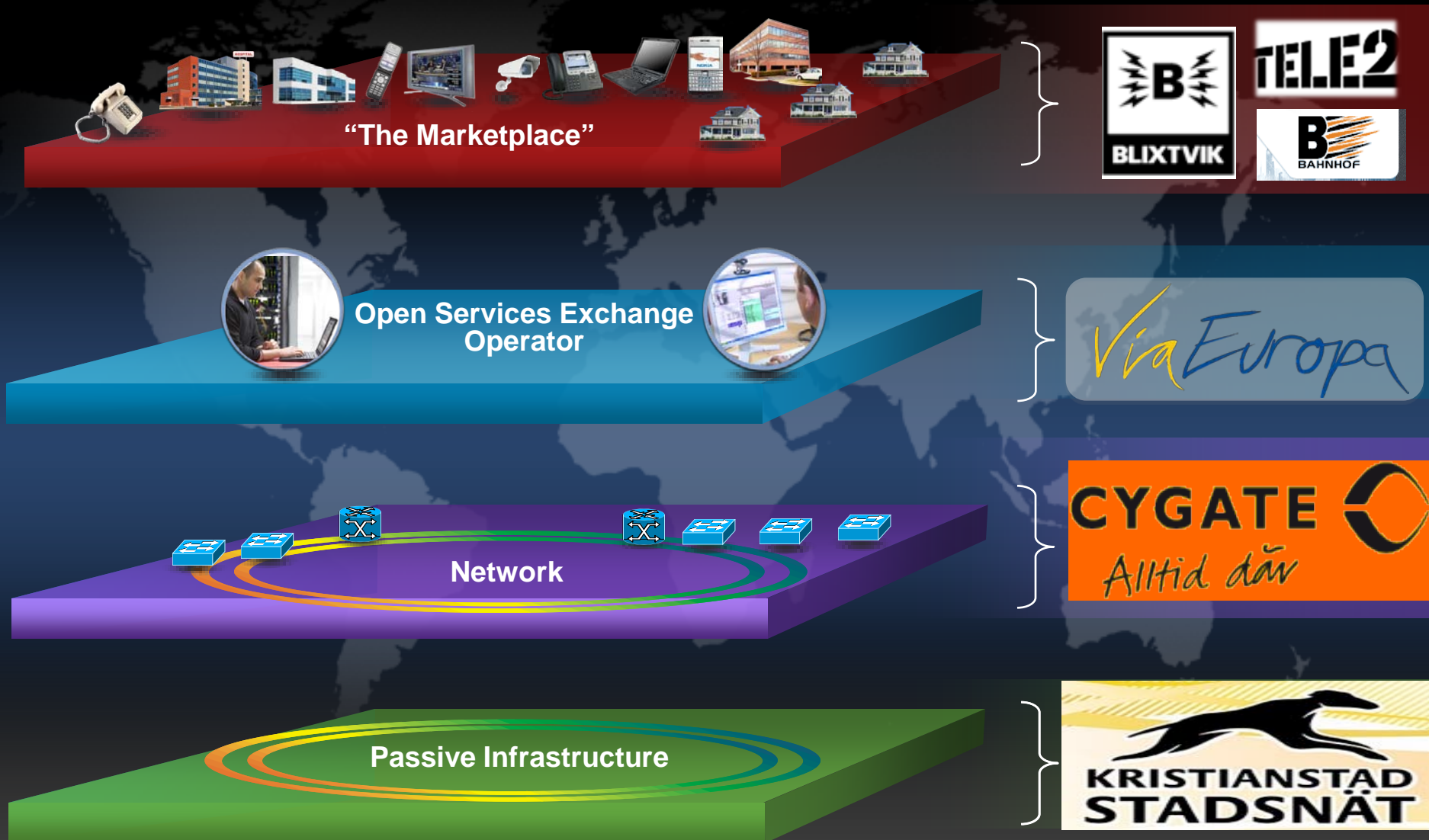


**MEDIA**



# The Open Services Exchange Model

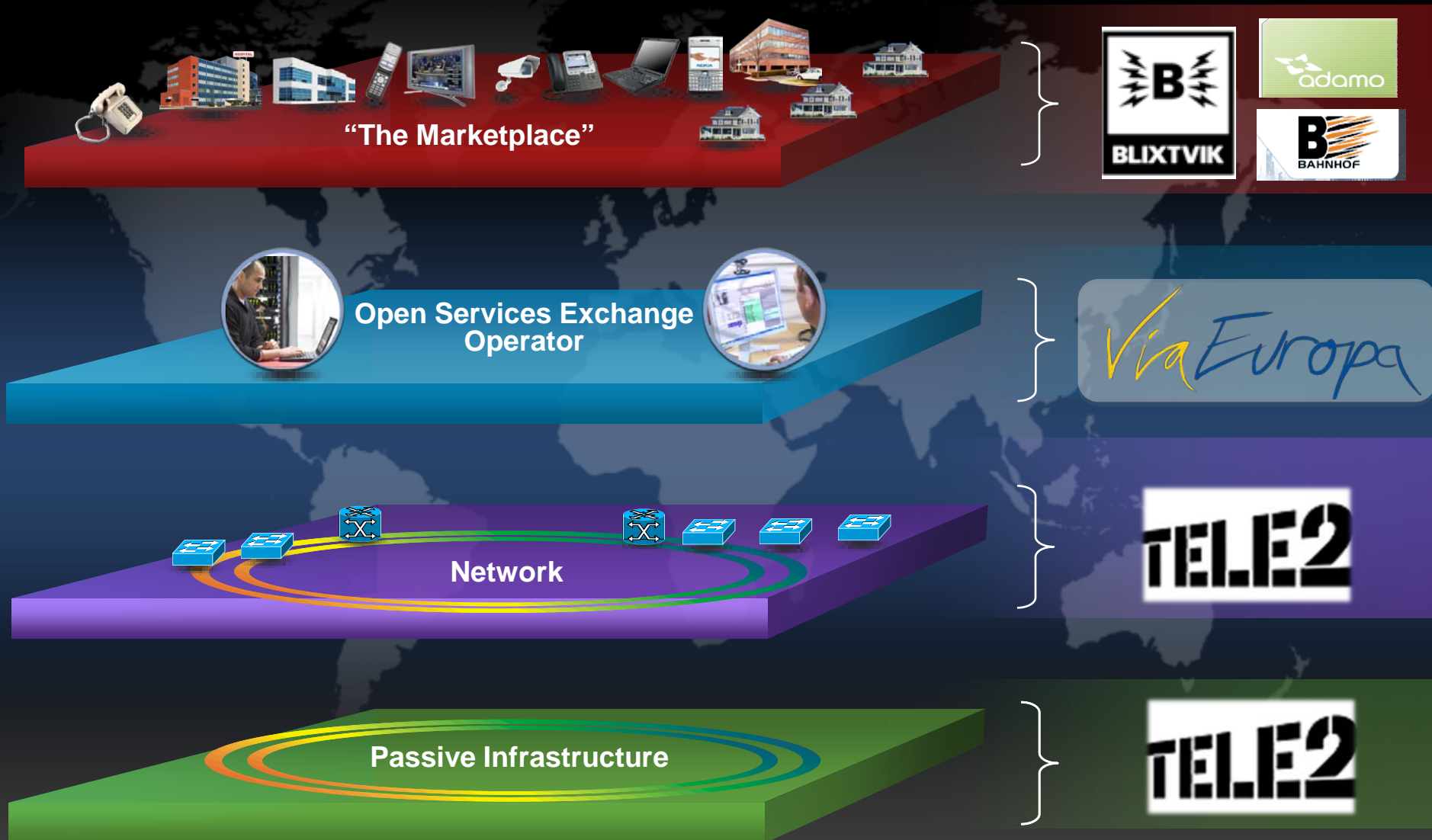
## C4 Energi 2007 - 2010





# The Open Services Exchange Model

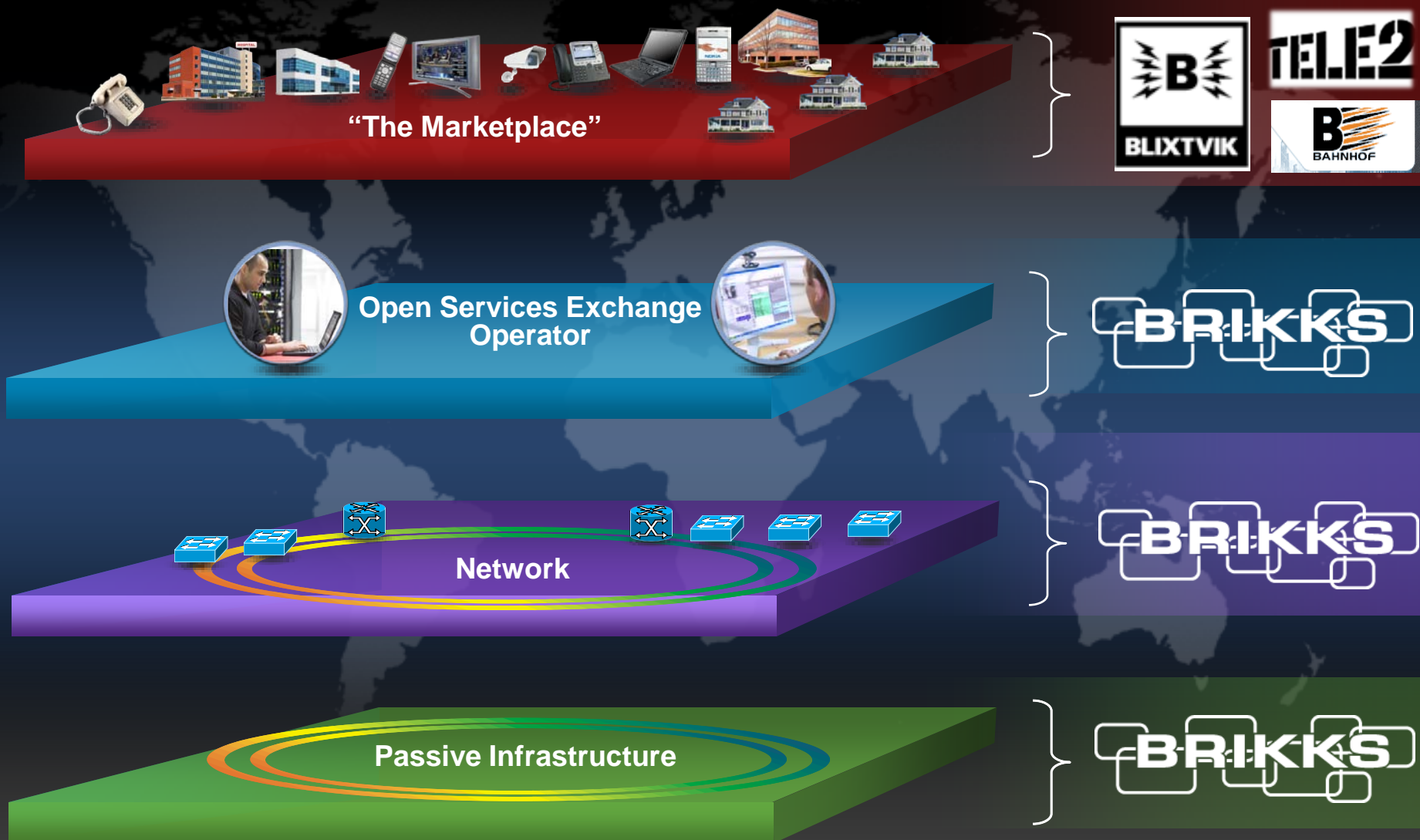
## Norrköping ½ Hyresbostäder 2010





# The Open Services Exchange Model

## C4 Energi - 2009





359 :-

Det här ingår	Erbjudande	Paketpris	Hastigheter & priser	Villkor	Systemkrav	Guider
<b>Hastigheter och priser</b> <a href="#">Prislistan för Telia Bredband »</a>						
<b>12-24 Mbit/s</b>		<b>Bredare än brett. Fortare än fort.</b> Valet för dig som vill surfa, spela online och ladda hem film och musik snabbare än någonsin förut. <ul style="list-style-type: none"><li>• Upp till 24 Mbit/s nedströms och upp till 2,5 Mbit/s uppströms</li><li>• <b>Pris: 359 kr/mån</b></li></ul>				
<b>6-8 Mbit/s</b>		<b>För dig som skickar och tar emot tunga filer.</b> Eller vill se film direkt på webben. Rekommenderas till familjen där fler delar på bandbredden. <ul style="list-style-type: none"><li>• Upp till 8 Mbit/s nedströms och upp till 0,8 Mbit/s uppströms</li><li>• <b>Pris: 309 kr/mån</b></li></ul>				
<b>1,5-2 Mbit/s</b>		<b>Full tillgång till internets alla möjligheter.</b> Lyssna på webbradio, ladda hem tunga dokument och spela online. <ul style="list-style-type: none"><li>• Upp till 2 Mbit/s nedströms och upp till 0,4 Mbit/s uppströms</li><li>• <b>Pris: 252 kr/mån</b></li></ul>				



Beskrivning

Priser

329 :-

## Snabbt och billigt bredband

### 24 Mbit/s

Fr. 279 kr/mån.

Med 24 Mbit/s får du en hastighet från 12 upp till 24 Mbit/s. När du spelar spel på nätet, laddar hem riktigt tunga filer och vill att det ska gå löjligt fort.

### 8 Mbit/s

Fr. 229 kr/mån.

Med 8 Mbit/s får du en hastighet från 6 upp till 8 Mbit/s. Perfekt om det finns fler datorer i hemmet och ni vill att det ska gå riktigt fort.

### 2 Mbit/s

Fr. 199 kr/mån.

Med 2 Mbit/s får du en hastighet från 1,5 upp till 2 Mbit/s. Surfa snabbt, lyssna på webbradio och tv och hämta tyngre filer.

**Tele2 har hastighets-garanti.**

Läs mer

\* Priserna på bredbandet gäller för dig som har eller skaffar hemtelefoni hos Tele2. För dig som enbart vill ha bredband hos Tele2 tillkommer 50 kr/mån på bredbandet.

## 100 Mbit/s ner - 100 Mbit/s upp

Leverantör	Månadskostnad	Startkostnad	Bindningstid	
 Bahnhof	<del>449 kr</del> 0 kr	0 kr	Avtalet löper 3 månader i taget	<a href="#">Läs mer »</a>
 Blixtvik	<del>399 kr</del> 200 kr	0 kr	Ingen	<a href="#">Läs mer »</a>
 Bredband2	<del>399 kr</del> 0 kr	0 kr		
 Connect2IP	<del>379 kr</del> 0 kr	0 kr		
 PiratISP	<del>370 kr</del> 0 kr	0 kr		
 Telecom3 Networks AB (T3)	<del>389 kr</del> 195 kr	0 kr		
 TOP24	<del>387 kr</del> 0 kr	0 kr		

370 :-

279 :-



## Viasat - Open Choice



OPEN → CHOICE

Digital-TV via bredbandsuttaget.

En box - flera leverantörer. Läs mer om konceptet **Open Choice »**

**Vi ger dig underhållning på dina villkor.**

**Namn**

Open Choice Digital-TV

Unikt

**Läs mer »**

## CanalDigital



Digital-TV via bredbandsuttaget

**Det personliga valet för underhållning och kommunikation.** Canal Digital's affärsidé är att paketera och leverera det mest attraktiva TV-utbudet till TV-tittarna.

**Namn**

Digital-TV

**Läs mer »**

# Better Broadband *Business*



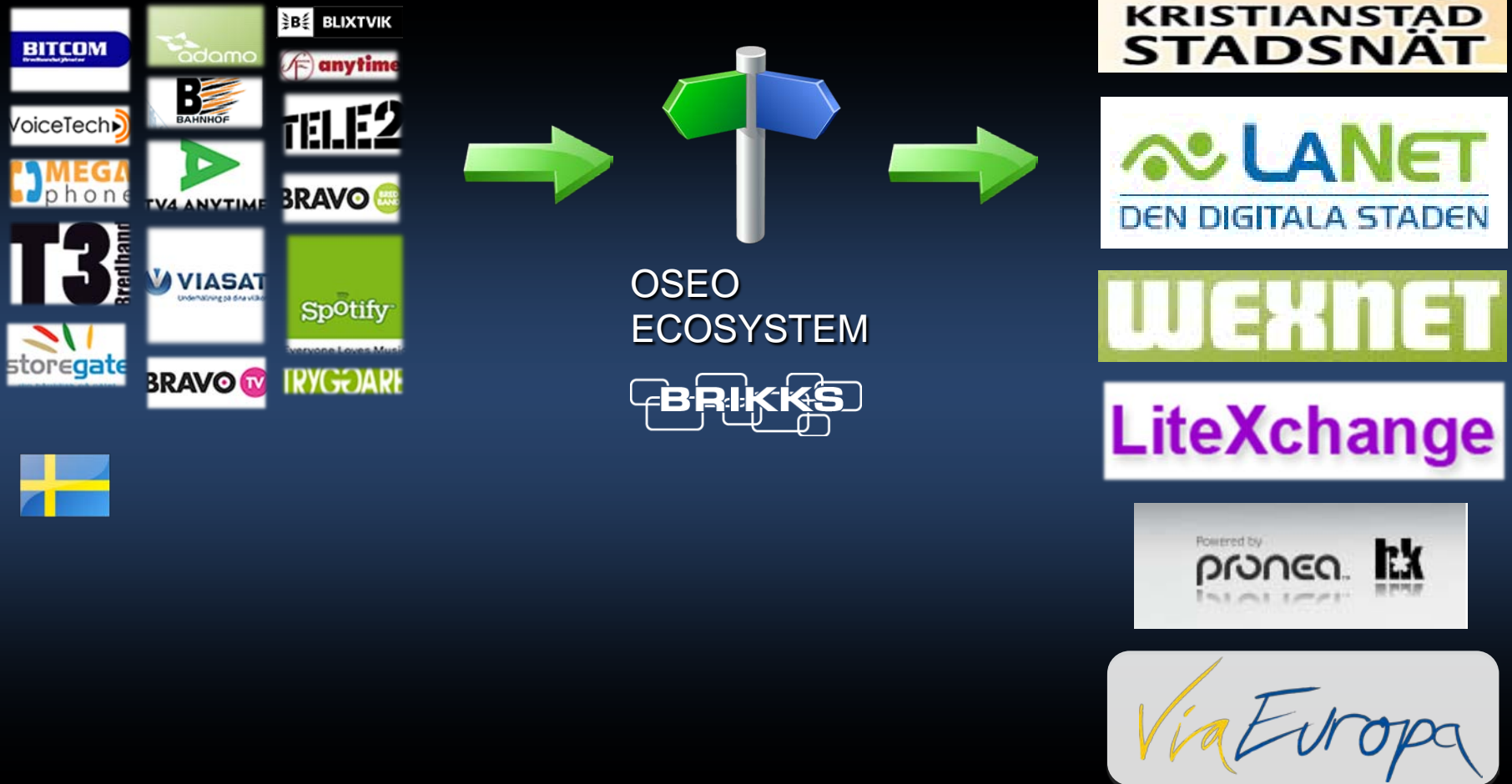
# Open Services Exchange Operation in Infrastructure

## Implementation – starting point of OSEO in – Skåne



# Open Services Exchange Operation in Infrastructure

## Implementation – starting point of OSEO in – Skåne





# Open Services Exchange Operation in Infrastructure Implementation – phase 1 – Example new service

## AXIS M3014 Fixed Dome Network Camera

Ultra-discreet, recessed-mount video surveillance solution



Watch video



**TRYGGARE**  
www.tryggare.net

Användarnamn: \_\_\_\_\_  
Lösenord: \_\_\_\_\_  
Logga in

HEM NYHETER TJÄNSTER OM OSS REGISTRERING FAQ

**TRYGGARE GER DIG DIGITAL NÄRVARO**

Med några klick får du en överblick som aldrig förr!  
Du kan enkelt få ett meddelande när något händer, antingen e-post eller sms, eller logga in och kolla vad som händer just nu.

**TESTA TJÄNSTEN UTAN KOSTNAD!**

...till den 31 maj 2007. Därefter väljer du ett av tre abonnemang (dock finns det även en fortsättning på fr nivå).

**Så kommer du igång:**

- Köp en trygghetskamera från Axis**  
STS 207 W  
STS 211 A
- Registrera dig här på tryggare.net**  
REGISTRERA DIG

**Vad behövs mer?**

- En internetuppkoppling och ström till kameran
- Tillgång till webben så att du kan se och hantera tjänsten
- Du kan alltid komma åt tryggare.net med en mobiltelefon med internet. Du kan både titta live och få larm till din telefon!




















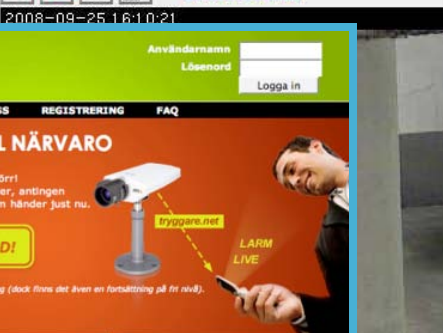




















# Open Services Exchange Operation in Infrastructure Implementation – phase 1 – Example new service

**TRYGGARE** www.tryggare.net LKF Logga ut

Kameror Händelser/Larm Inställningar Hjälp Frågor och svar

Du har 7318 händelser sedan din förra kvittens.

Välj vy: Vy: G2

    <b>G2 - Nedfart</b> 2008-09-25 16:10:23 	    <b>G2 - 2</b> 2008-09-25 16:10:22 	    <b>00408C8C4707</b> 2008-09-25 16:10:22 
    <b>00408C8C489E</b> 2008-09-25 16:10:21 	    <b>vänsterlängst upp</b> 2008-09-25 16:10:21 	    <b>längst ner</b> 2008-09-25 16:10:23 
    <b>dörren park</b> 	    <b>00408C8C486C</b> 	

**TRYGGARE** www.tryggare.net

HEM NYHETER TJÄNSTER OM OSS REGISTRERING FAQ

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A night photograph of a city street, likely in Sweden, featuring a yellow tram. The image is overlaid with a blue grid pattern. The text "SWE ;. )" is prominently displayed in the center.

*“SWE ;. )”*

## Social micropayments

Give to the people who make the things you like.

Get from people who like what you do.

 [Watch the video](#)

[See what you can flattr »](#)

Support creators, give to the things you love!



1

**1. You decide**  
You decide the amount you want to spend on flattr each month.



2

**2. You Flattr**  
During the month you flattr the things you want to support.




3

**3. We distribute**  
We then divide and distribute your money to the content creators

# MINECRAFT



A night photograph of a city street, likely in Stockholm, featuring a yellow taxi. The image is overlaid with a blue grid pattern. The text "SWE ;-(“" is prominently displayed in the center.

*“SWE ;-(“*

*“Teracom-skandalen x 2”*

*“Telia – prisdumpning x 2”*

*“Rouge Stadsnät”*