

IEEE COMMUNICATIONS SOCIETY



ComSoc Evolution and Society Partnerships

Alexander D. Gelman,

VP-Society Relations 2002-2003

VP-Membership Development, 2004-2005

San Francisco Chapter,

December 4, 2003

<http://www.comsoc.org>



IEEE COMMUNICATIONS SOCIETY

Society Relations Council



Society Relations Council
Alex Gelman

Related Societies Board

Curtis Siller

*Related Society is a professional society within or outside of IEEE, National or International whose technical **scope is complementary** to the one of ComSoc*

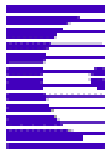
Examples: ISOC, ACM, IEEE CompSoc, IEEE SP Soc

Sister Societies Board

Algirdas Pakstas

*Sister Society is a professional society International or National whose technical **scope is the same or similar** to the one of ComSoc*

Examples: LITTA, IEICE,, KICS, SBrT



Purpose

*The Society Relations Council is responsible for the oversight of Society relations with **IEEE** Societies and other professional societies throughout the world.*

It includes agreements with professional societies as well as promoting and coordinating Society/IEEE societies/professional-society activities globally.

<http://www.comsoc.org/socstr/pp/src.htm>

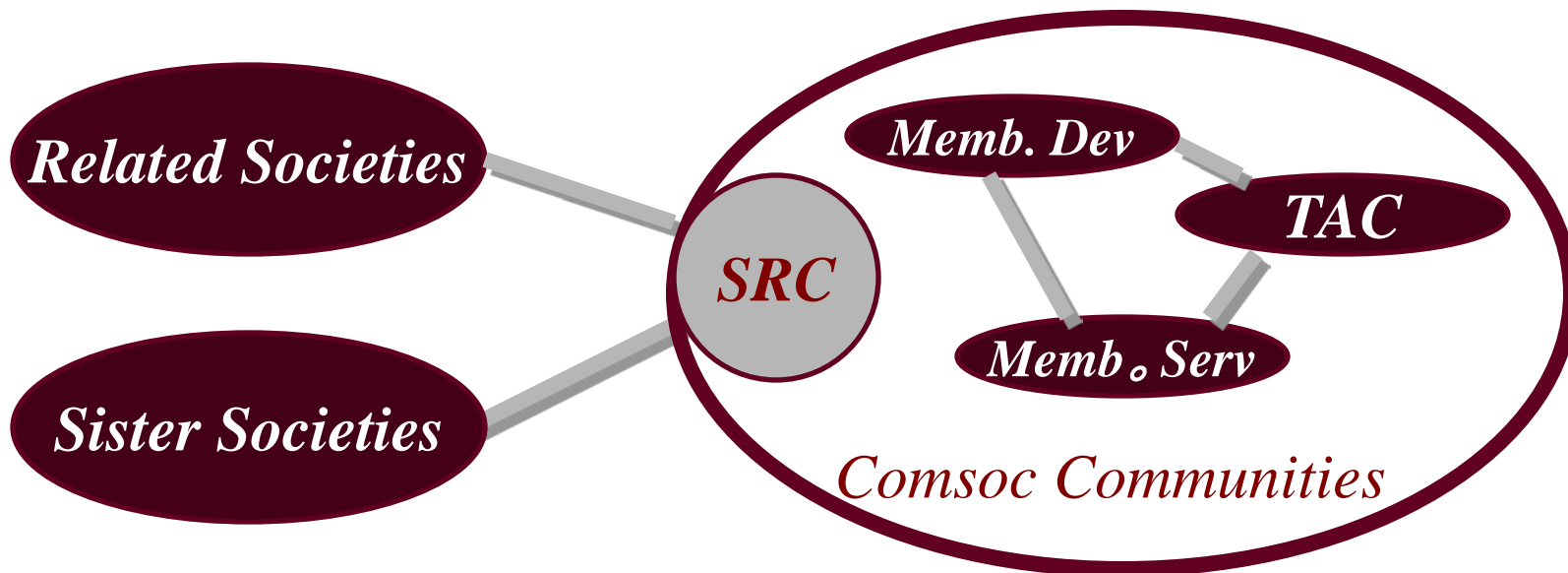


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Society Relations Council



COMSOC = Information Packaging + O&M of Human Networks + ϵ



SRC is Responsible for Professional Internetworking



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Society Relations Council



SRC is identifying and analyzing potential partner societies within and outside of IEEE World-wide.

Value to related and sister societies

- Access to COMSOC products and services
- Access to COMSOC members
- Improvement of their products and services
- COMSOC endorsement of their products and services
- Partnerships in publications and conferences
- Helps the industry -> benefits national societies

Benefits to COMSOC

- Source for new Membership
- New Markets for COMSOC services and products
- Improvement of COMSOC products by external contributions
- Growth of the virtual mass of the research community
- Helps current members in professional networking
- Helps the industry -> benefits COMSOC



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Society Relations Council



Modes of Relations

- Dual membership agreements
- Membership promotion programs
- Joint and cross Publication
- Joint Conferences/Workshops/Meetings
- Joint Academic and Professional Education Activities
- Joint Awards
- Joint Standardization Work

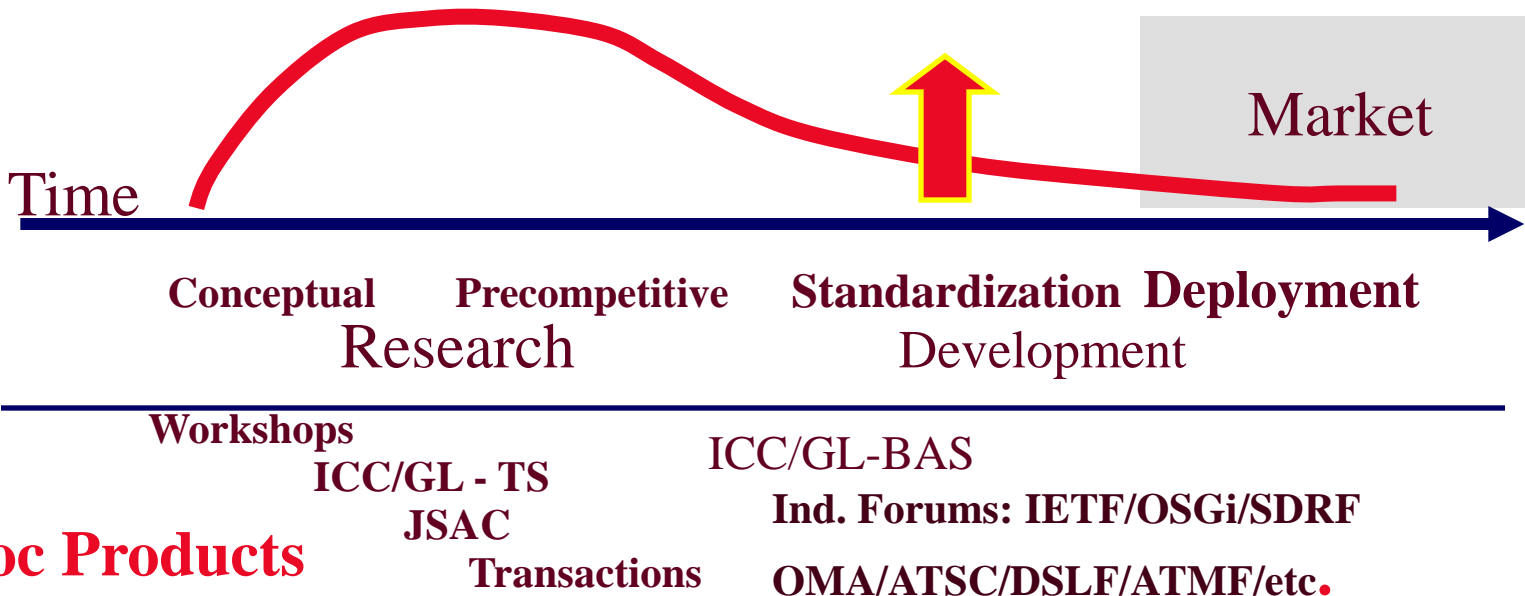


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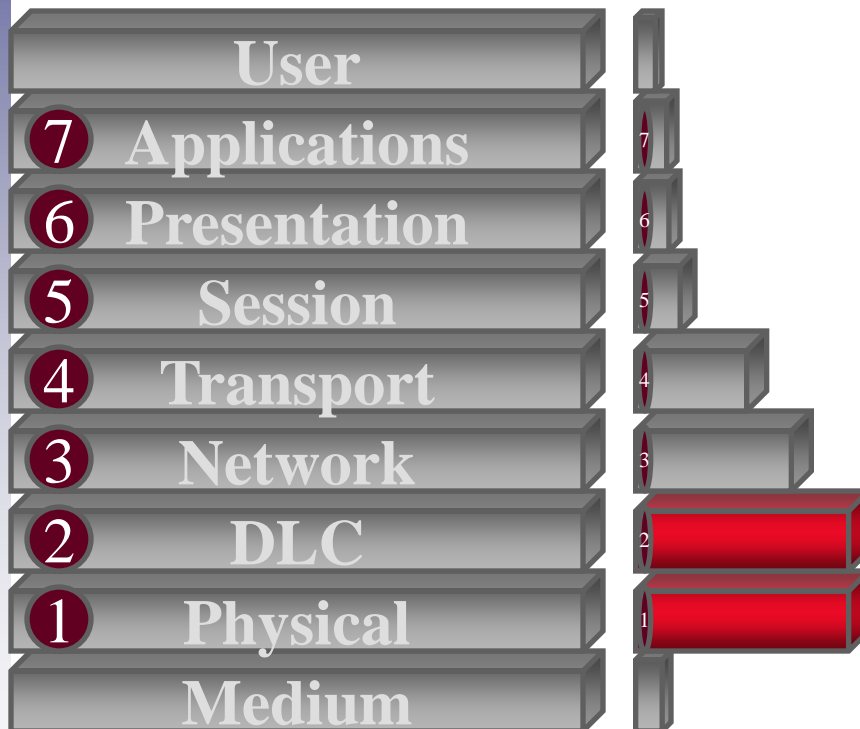
Comsoc in Time-to-Market Axis



Intensity of Comsoc Activities



*ComSoc must pursue activities in late stages of IPR value chain
- technical support of standardization/specification forums*



- Internet Society (ISOC)
- IEEE LEOS
- IEEE CAS
- IEEE Vehicular Technology Society
- IEEE Computer Society
- ACM
- IEEE Signal Processing Society

- IEEE Power Engineering
- IEEE Consumer Electronics Society
- IEEE Broadcast Technology Society

Products that that depended on fusion of two or more disciplines benefit from partnerships among societies with core competency in these disciplines



Society Relations Council

Related Societies



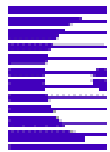
Products that that depended on fusion of two or more disciplines benefit from partnerships among societies with core competency in these disciplines

Current Partners:

- Internet Society (ISOC)
- IEEE LEOS
- IEEE CAS
- IEEE Vehicular Technology Society
- IEEE Computer Society
- ACM
- IEEE Signal Processing Society

Emerging Partners

IEEE Power Engineering
IEEE Consumer Electronics Society
IEEE Broadcast Technology Society



ComSoc's New Strategic Direction

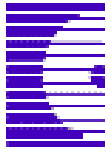
Consumer Communications Initiative



Consumer Applications must serve at least one of the following areas

- Domestic productivity
- Economics
- Education/profession/business
- Entertainment
- Family/community/social life
- Healthcare/welfare
- Safety

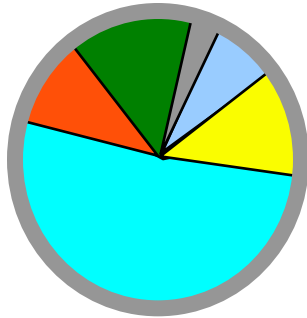
Pervasive Consumer Communications can be only supported by application-specific networked devices that are part of personal lifestyle



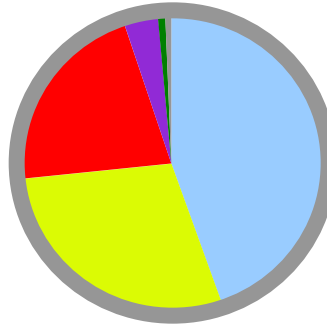
Consumer Communications and Networking

Who is on the Net

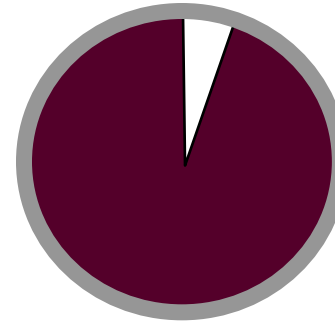
World Population



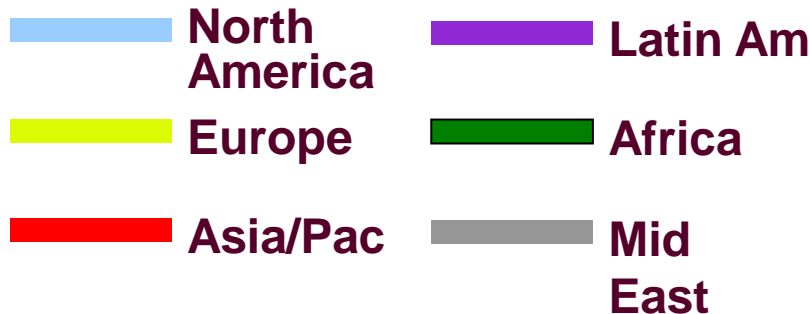
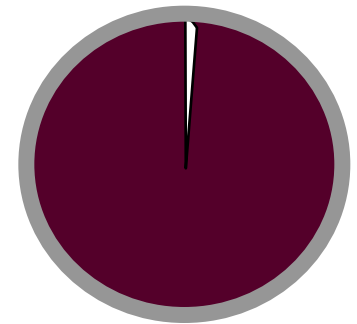
Internet Users



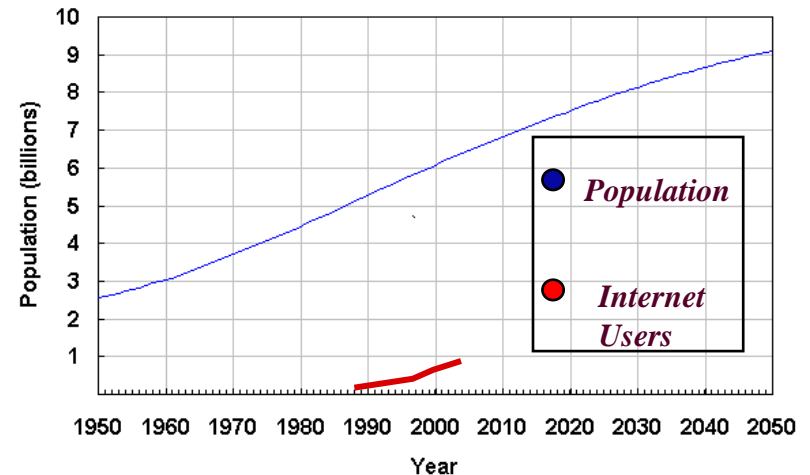
Total Internet Users



Connected AnyTime



World Population: 1950-2050



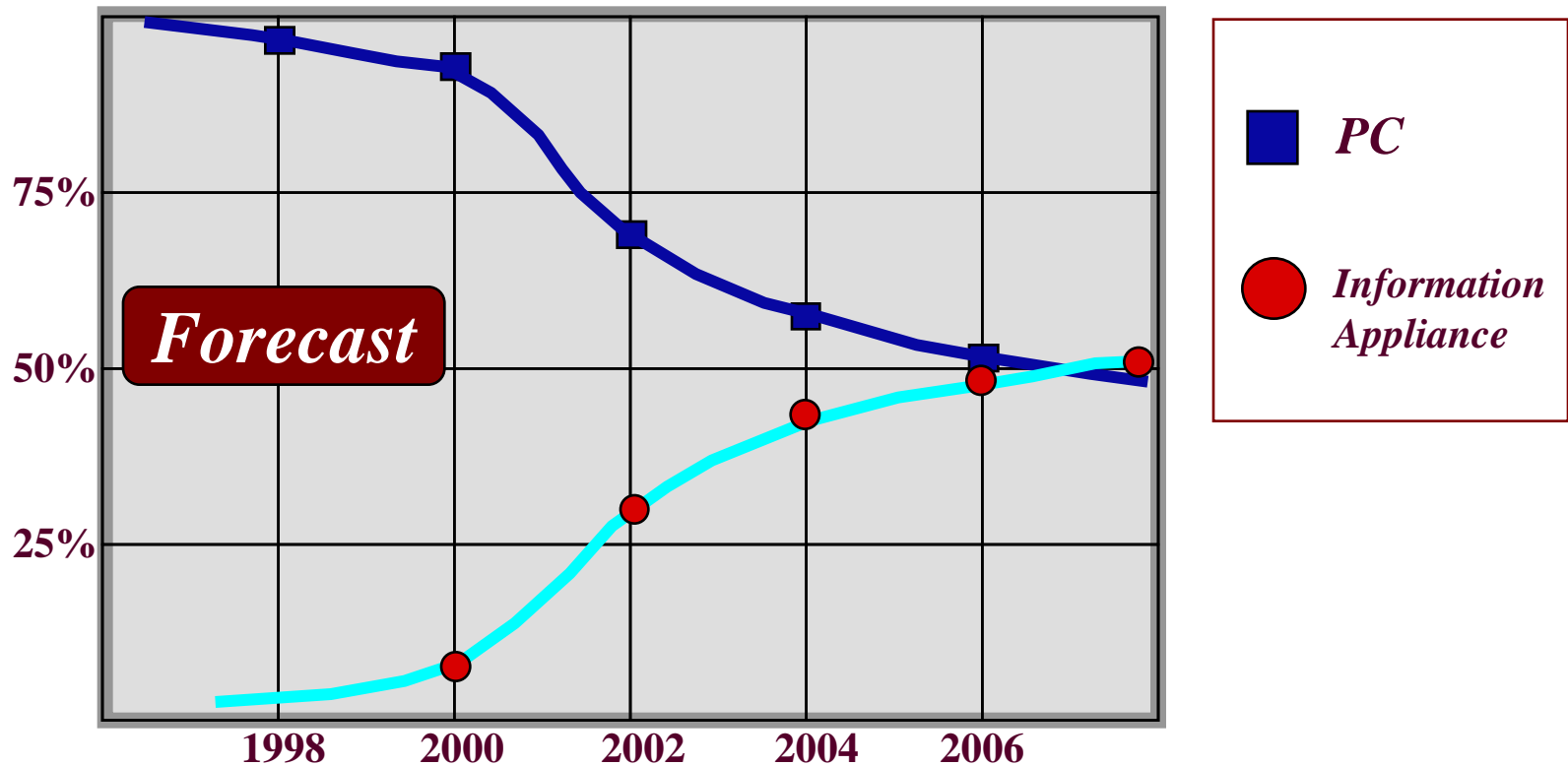
Source: U.S. Census Bureau, International Data Base 5-10-00.

<http://www.comsoc.org>



The Digital Divide

US Web Access Trend

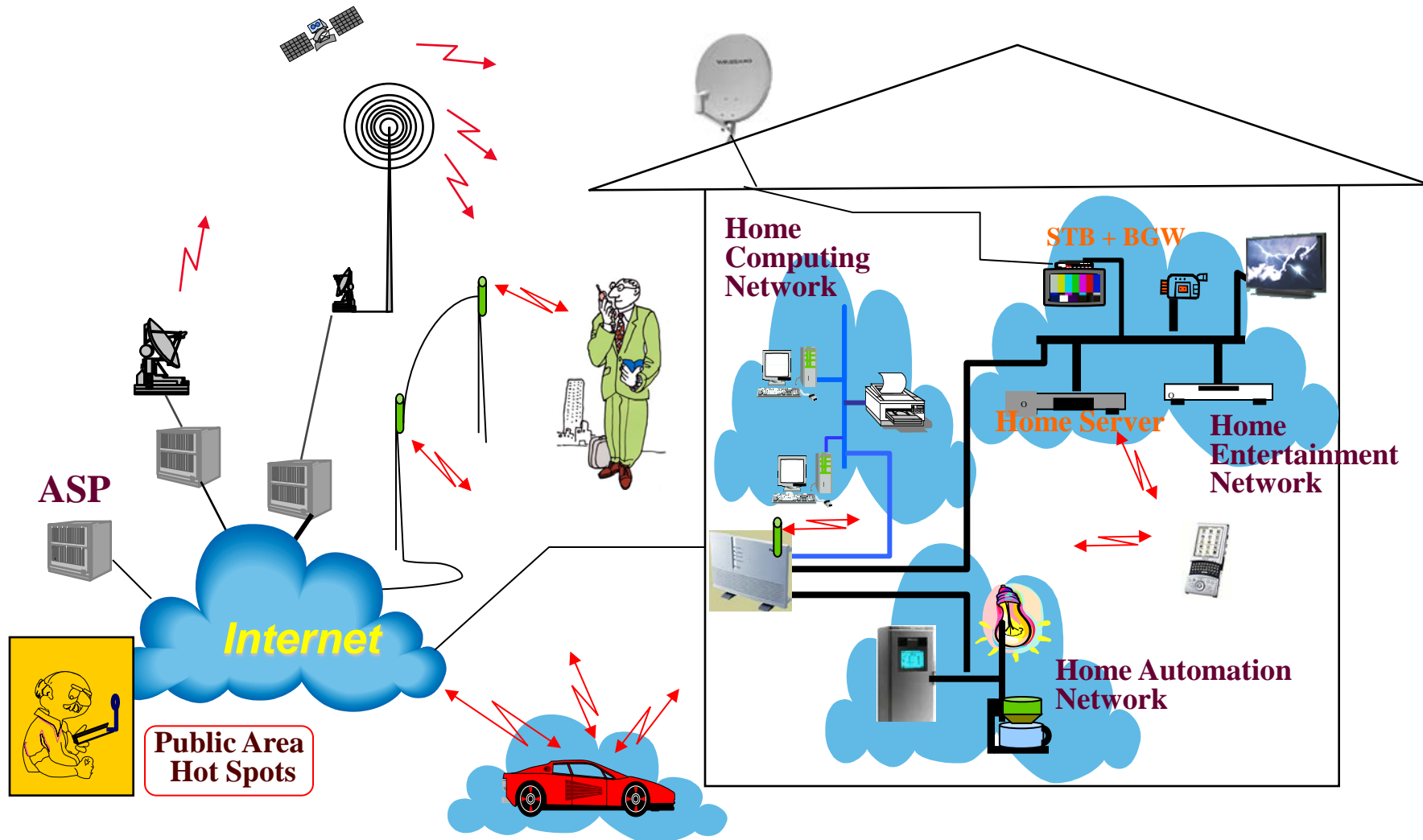


Application-specific information appliances will dominate as web access devices



Consumer Communications and Networking

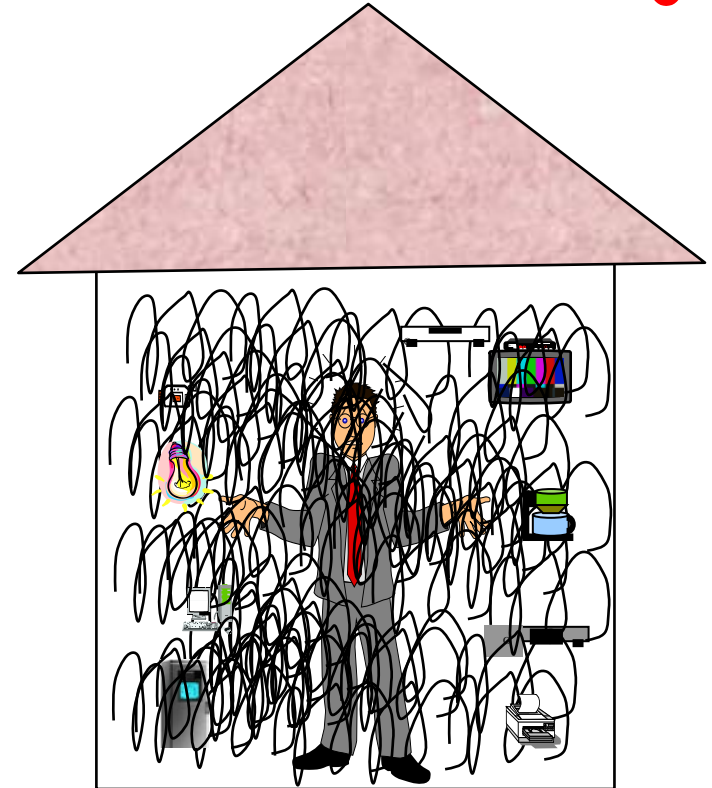
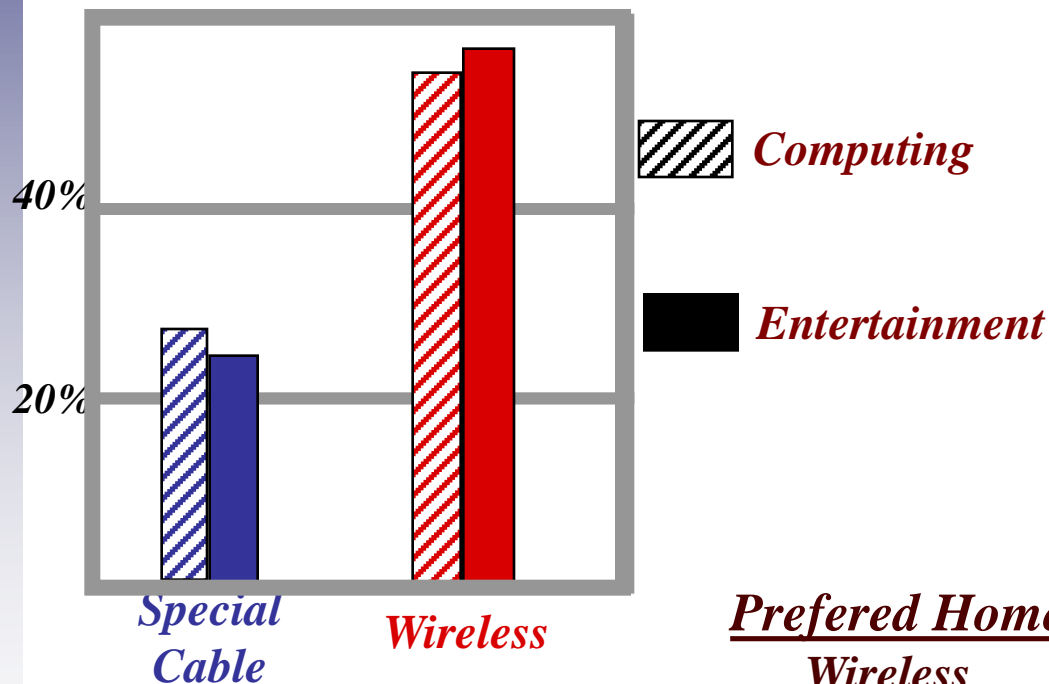
The Communications Scenario





Home Networking

User Preference of Wiring



Preferred Home Networking Technologies

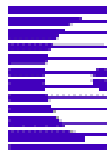
Wireless

UWB, Bluetooth, IEEE 802.11

Wireline

HPNA, HomePlug

<http://www.comsoc.org>



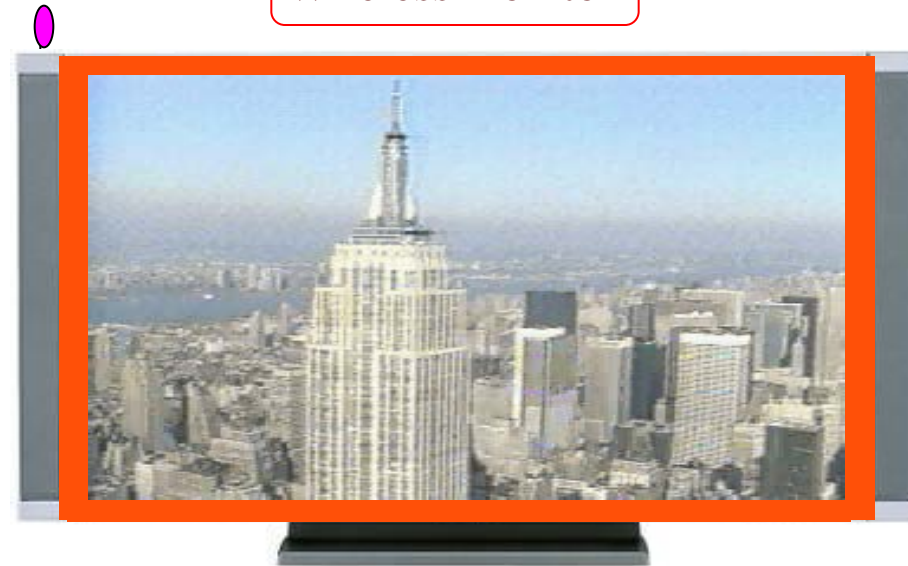
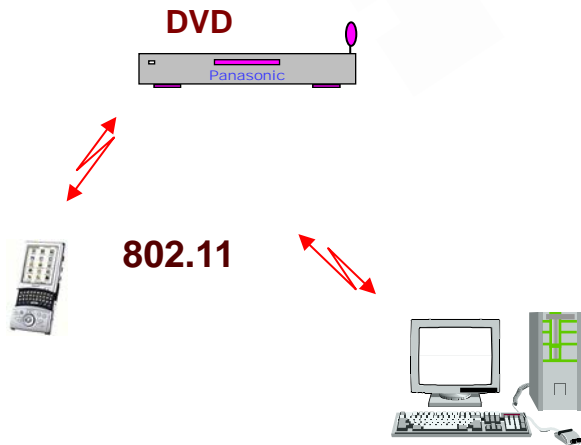
Consumer Communications and Networking

Wireless Technologies for Home Networking



UWB

Wireless monitor





Power Line Based Residential Networking

PLC-based Home Network: HomePlug



- *No new wiring*
- *Rate v1.0 14 Mb/s*
- *Multi-tone, adaptive modulation*
- *Logical domain separation*

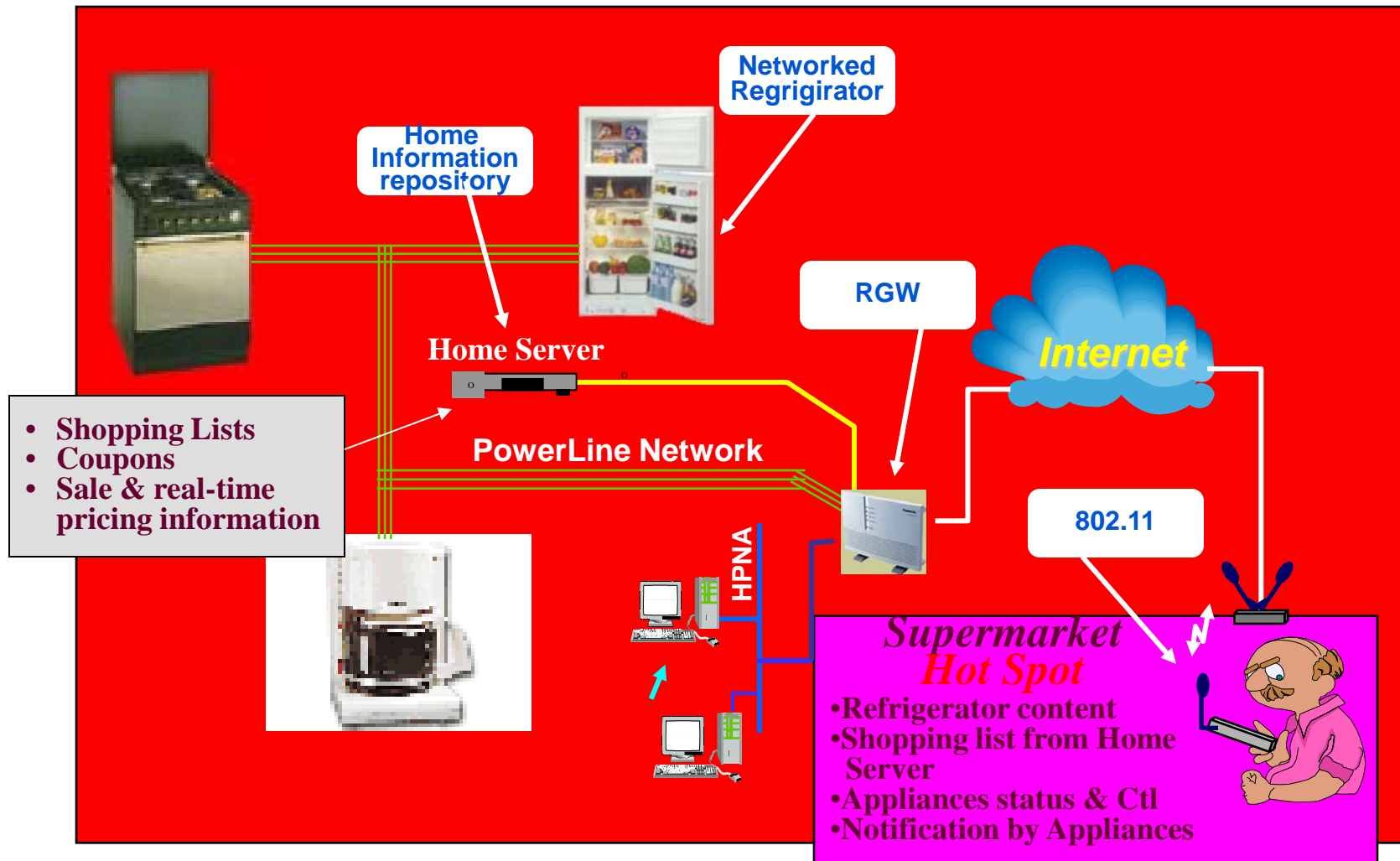
<http://www.homeplug.org>

<http://www.comsoc.org>



Domestic Productivity and Economics

Remote Access to Networked Appliances



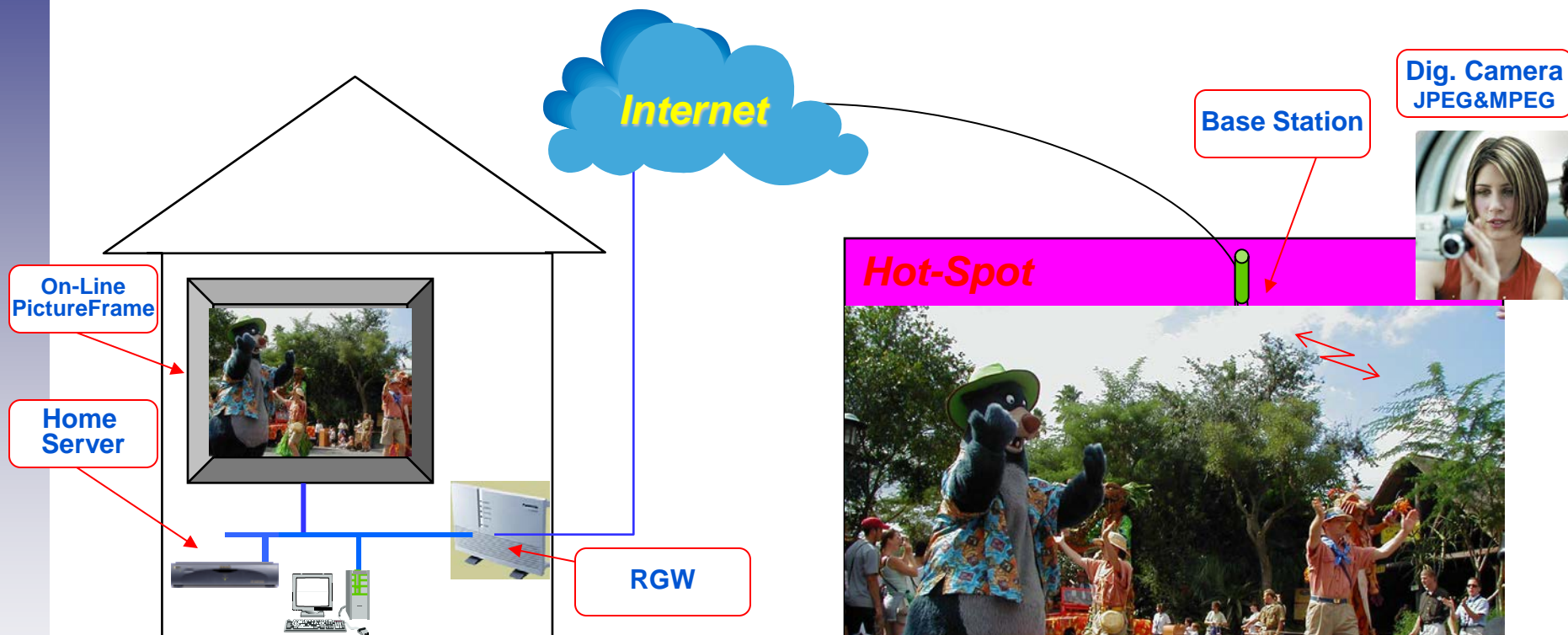


Family/Community/Social Life

On-Line Picture Frame Application



IEEE



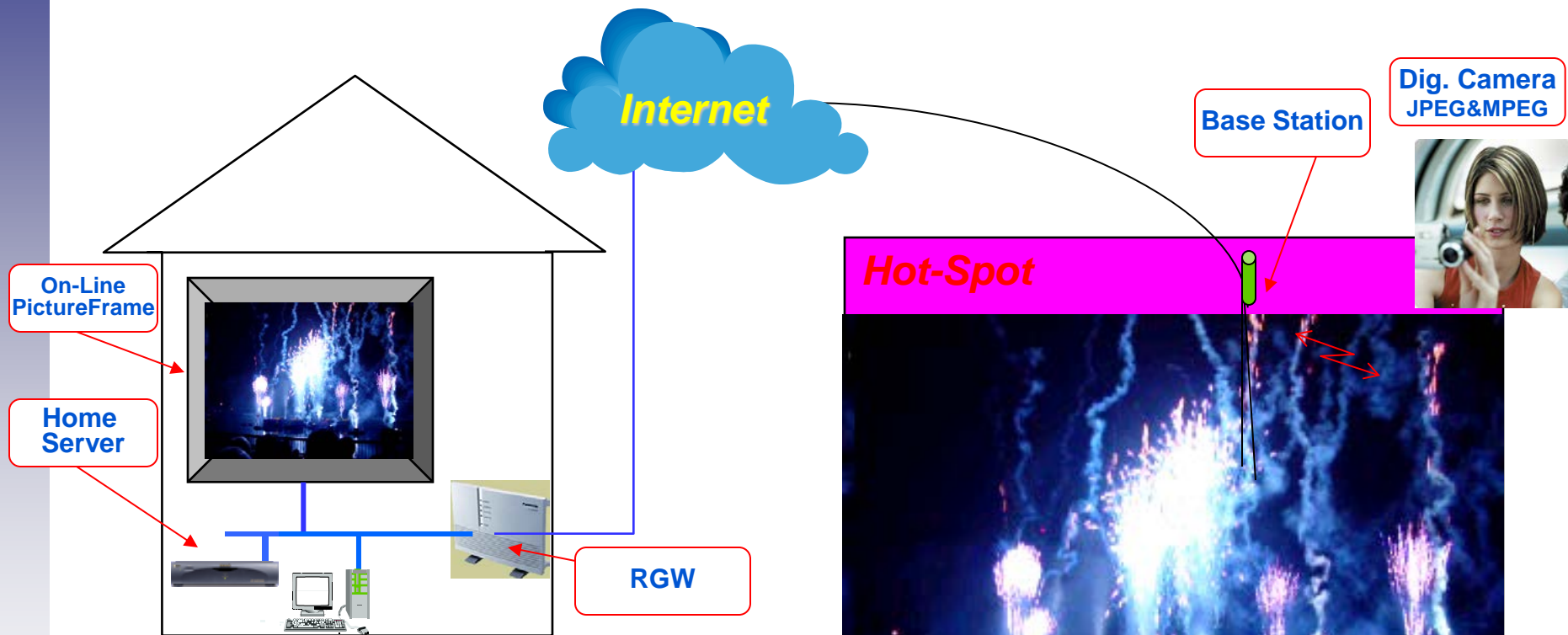
Application Features:

- Storage of dynamic JPEG/MPEG4 data
- Data retrieval periodically and on demand
- Notification by Server of new Data arrival



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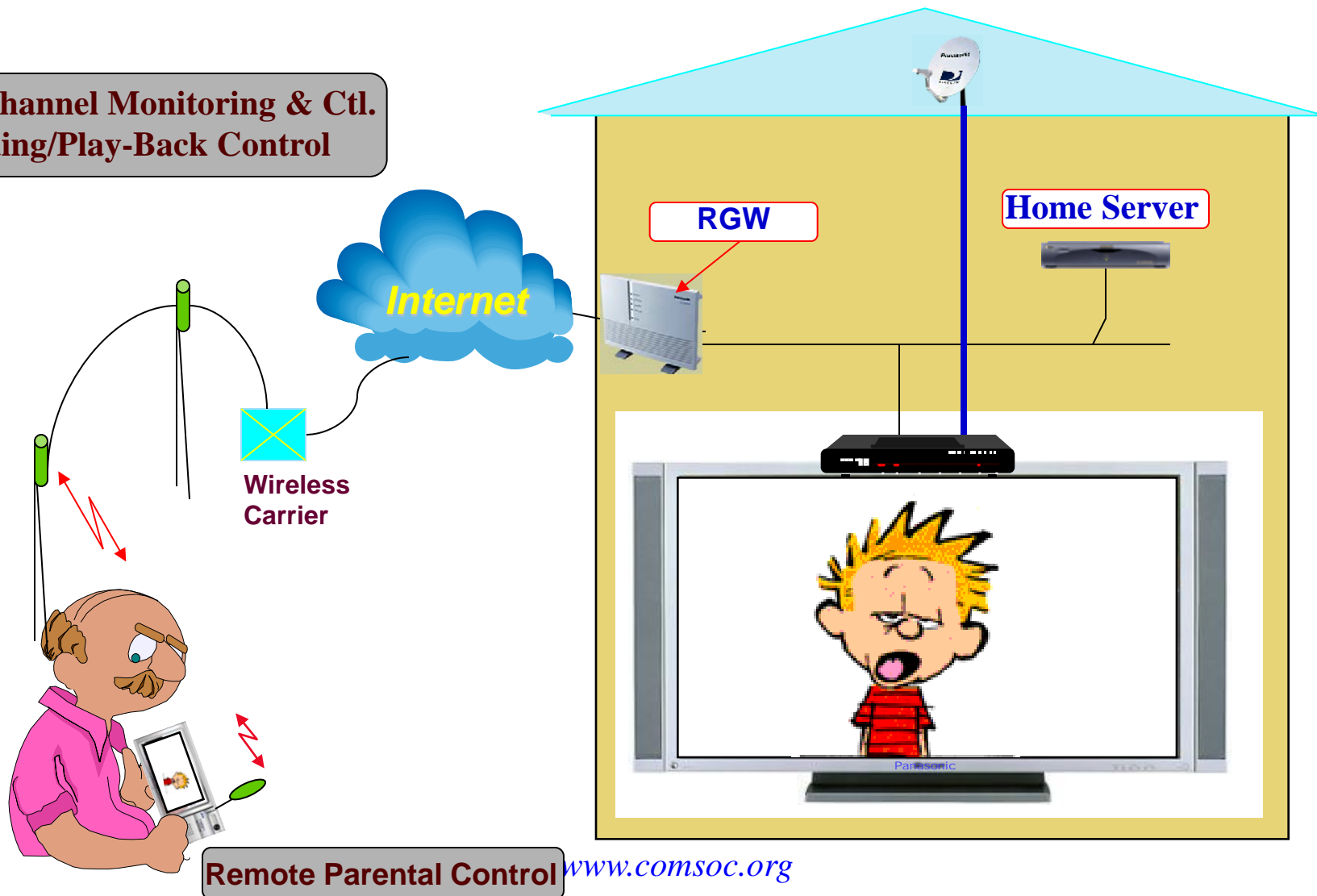
MPEG Clips – by Bruce Bergman



Entertainment

In and Out of Home Device Control

- DTV Channel Monitoring & Ctl.
- Recording/Play-Back Control

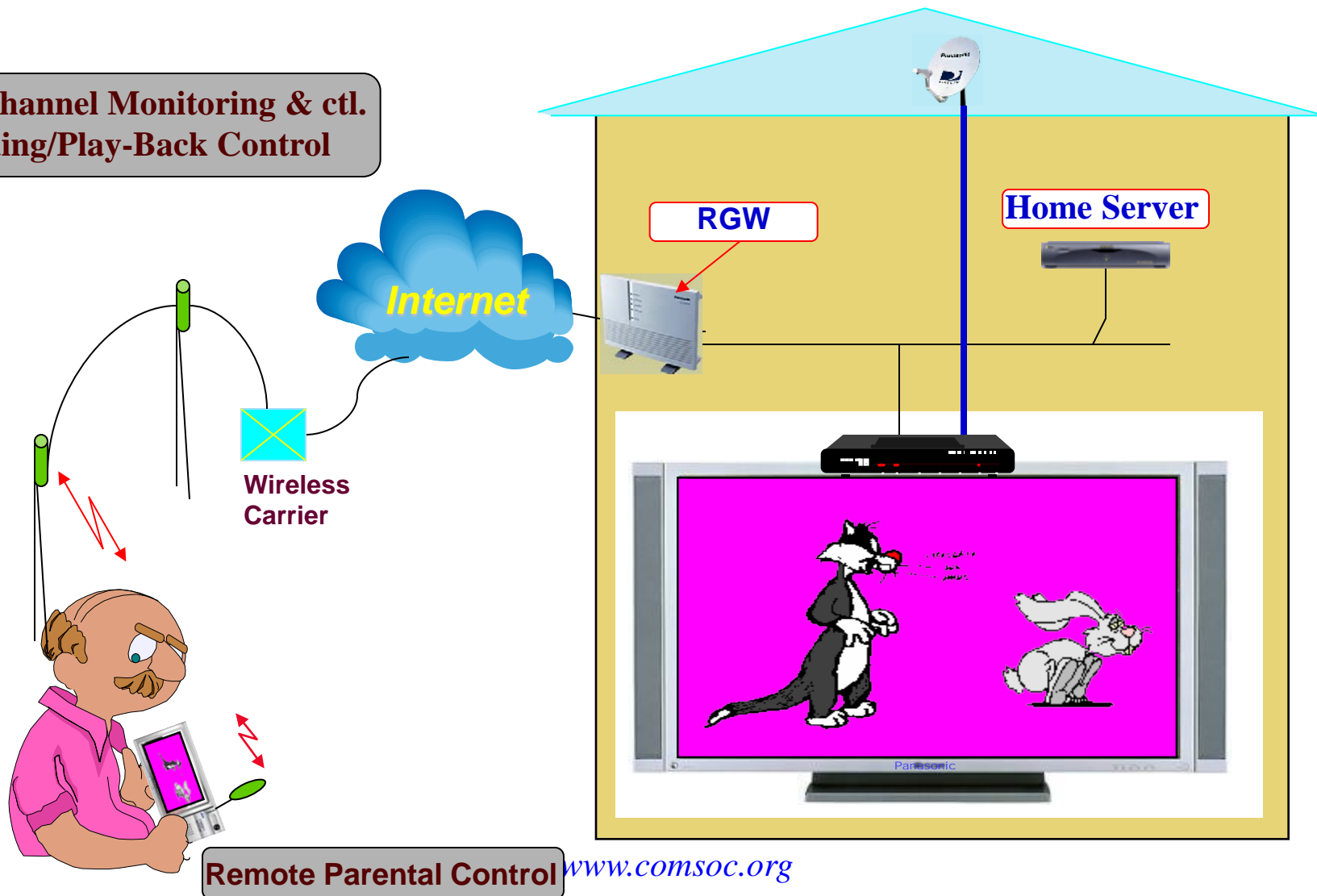




Entertainment

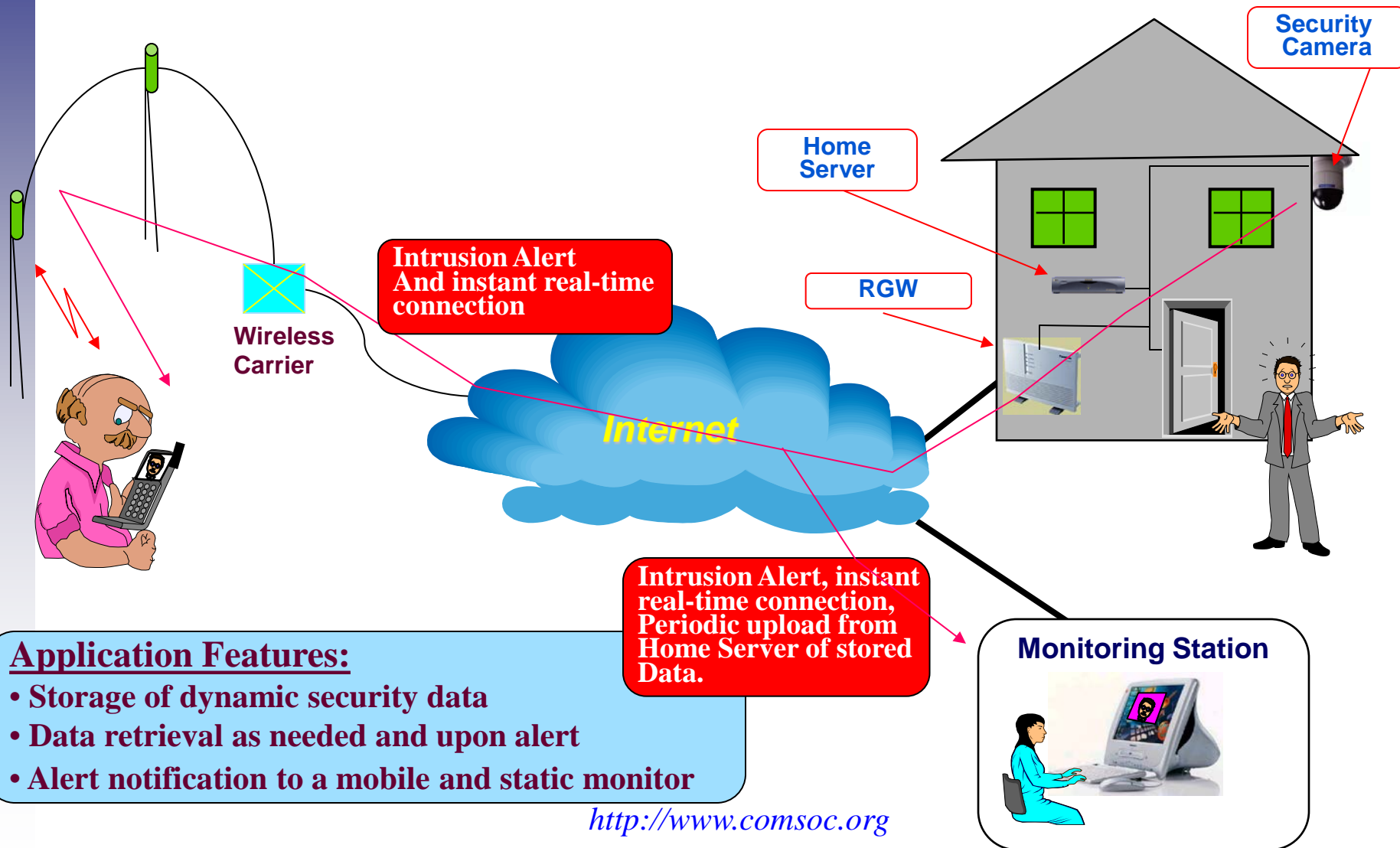
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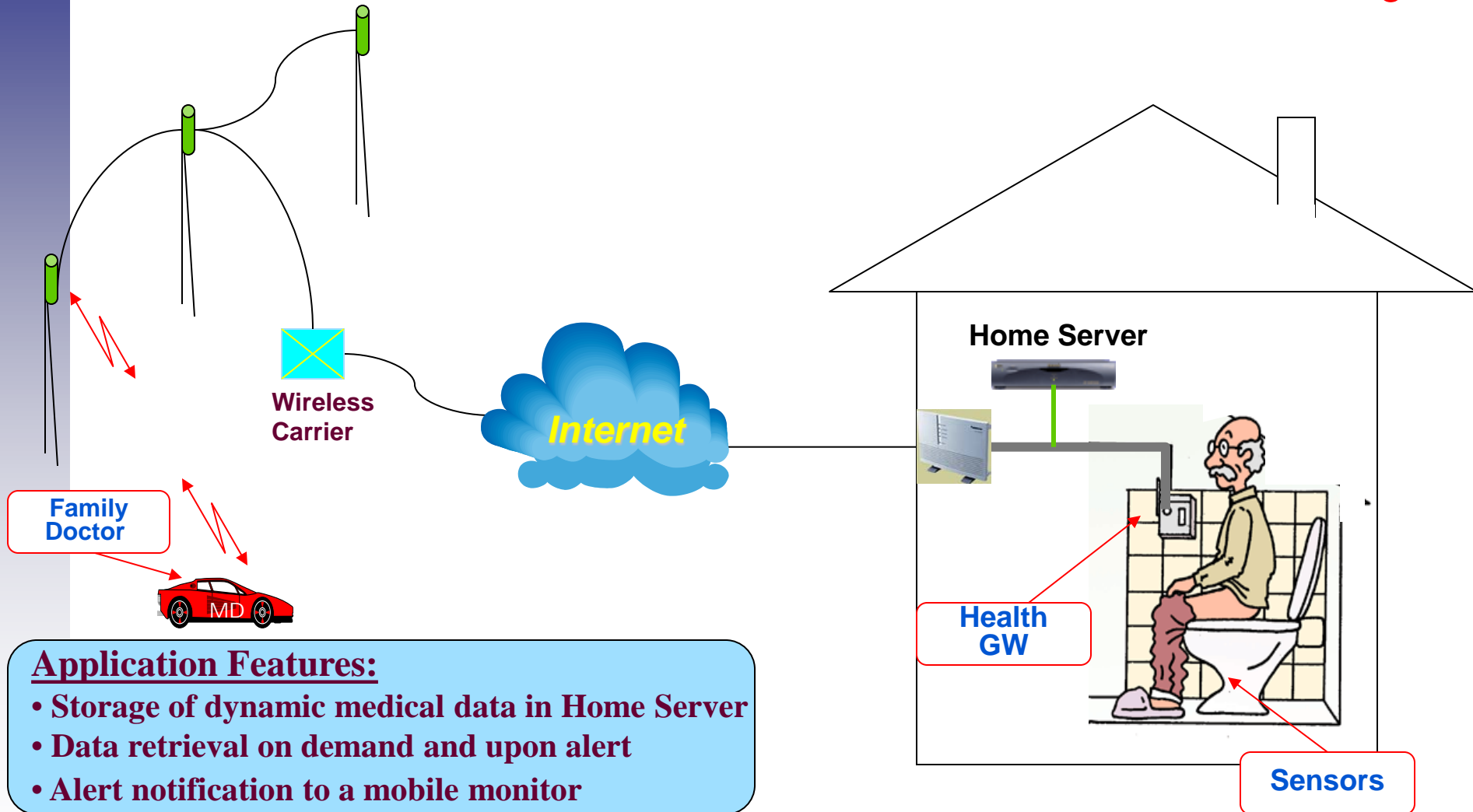
Consumer Safety Home Security Application

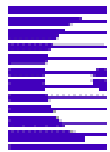




Healthcare/Welfare

Remote Health Monitoring and Analysis



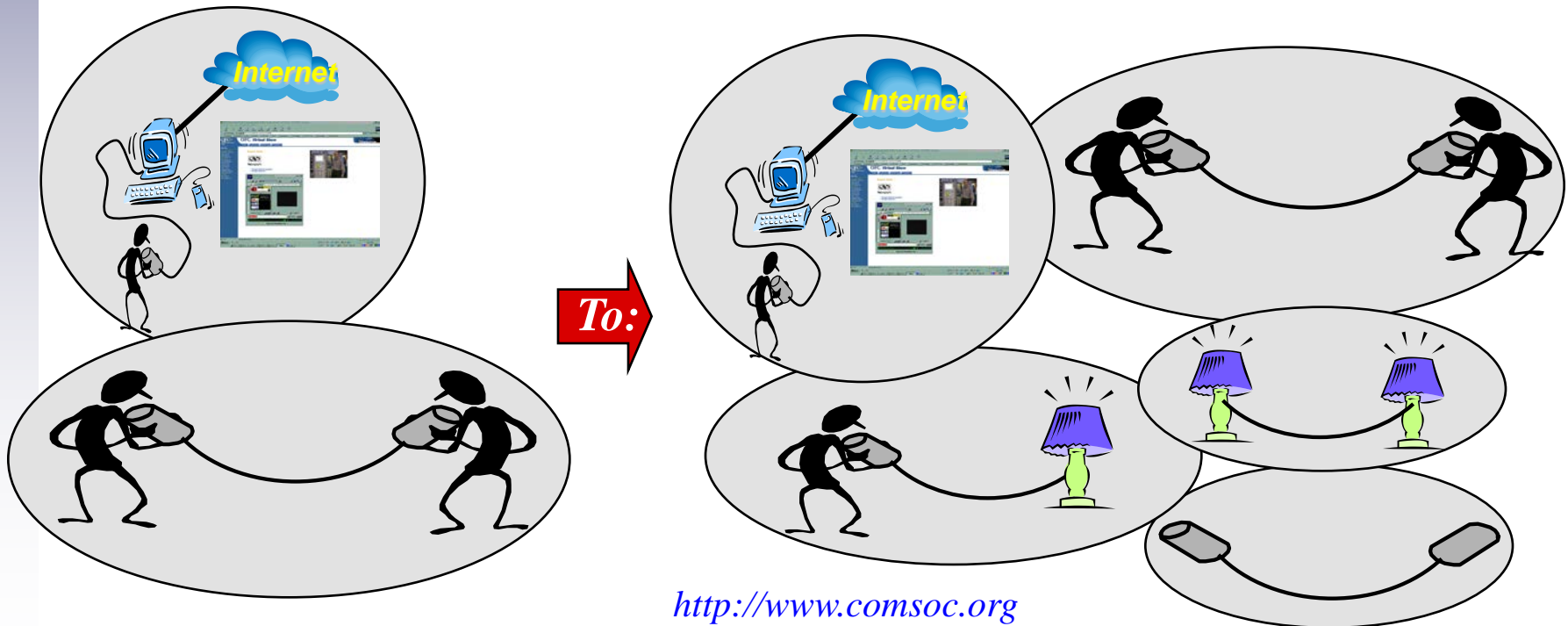


Consumer Communications and Networking Applications and Technology Trends

- Human-centric Information retrieval
- Human-to-Human communications
- Resident configuration & applications
- Middleware & Protocols: HTML, HTTP

To:

- Human/device-centric Information networking
- Human/Device peer-to-peer communications
- Auto Config & Downloadable applications
- Middleware & Protocols: XML, Java, HTTP, SIP, UPnP





Industry Evolution

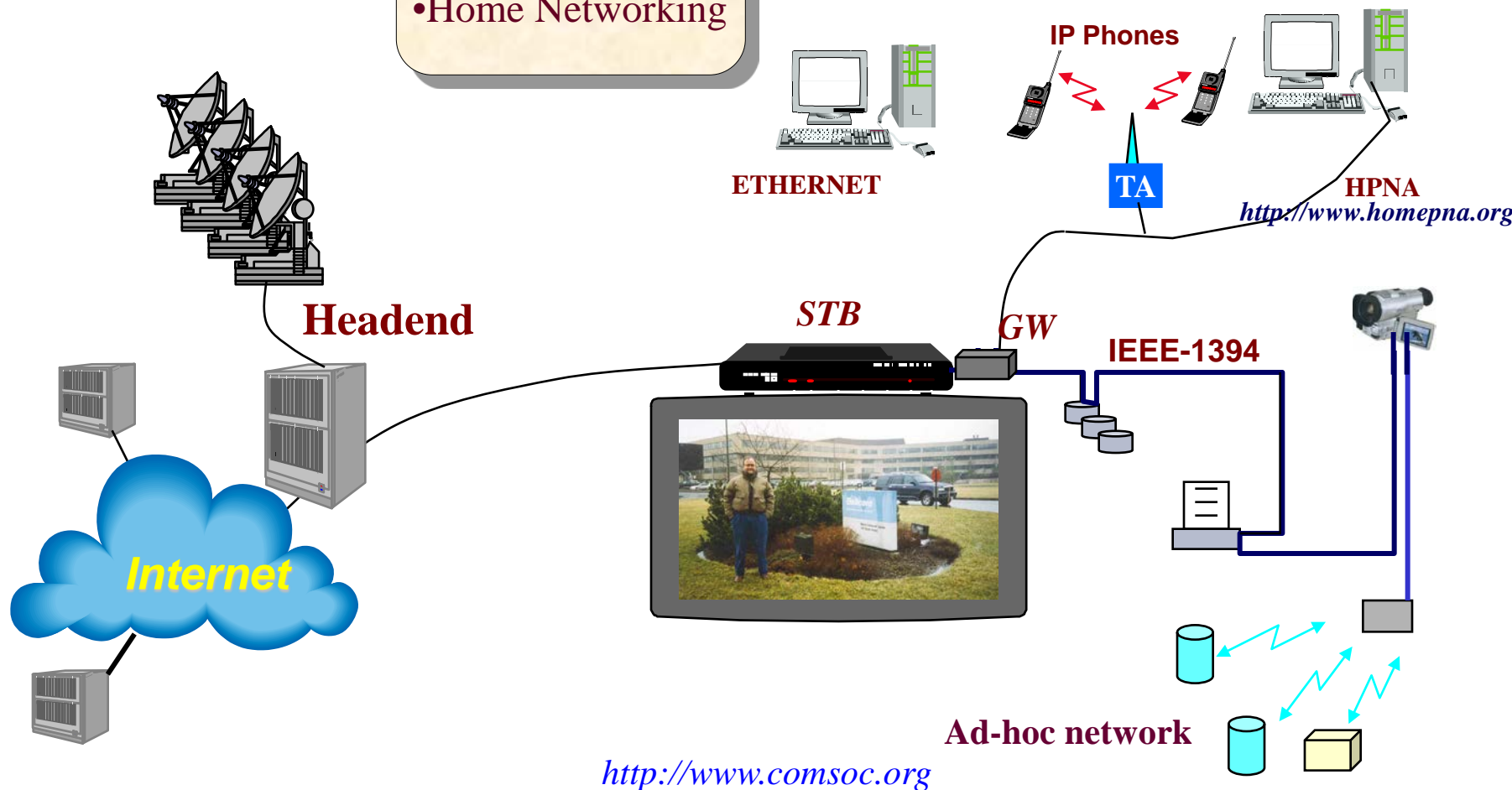
Cable TV Communications Scenario

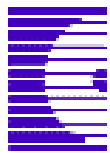


IEEE

Features:

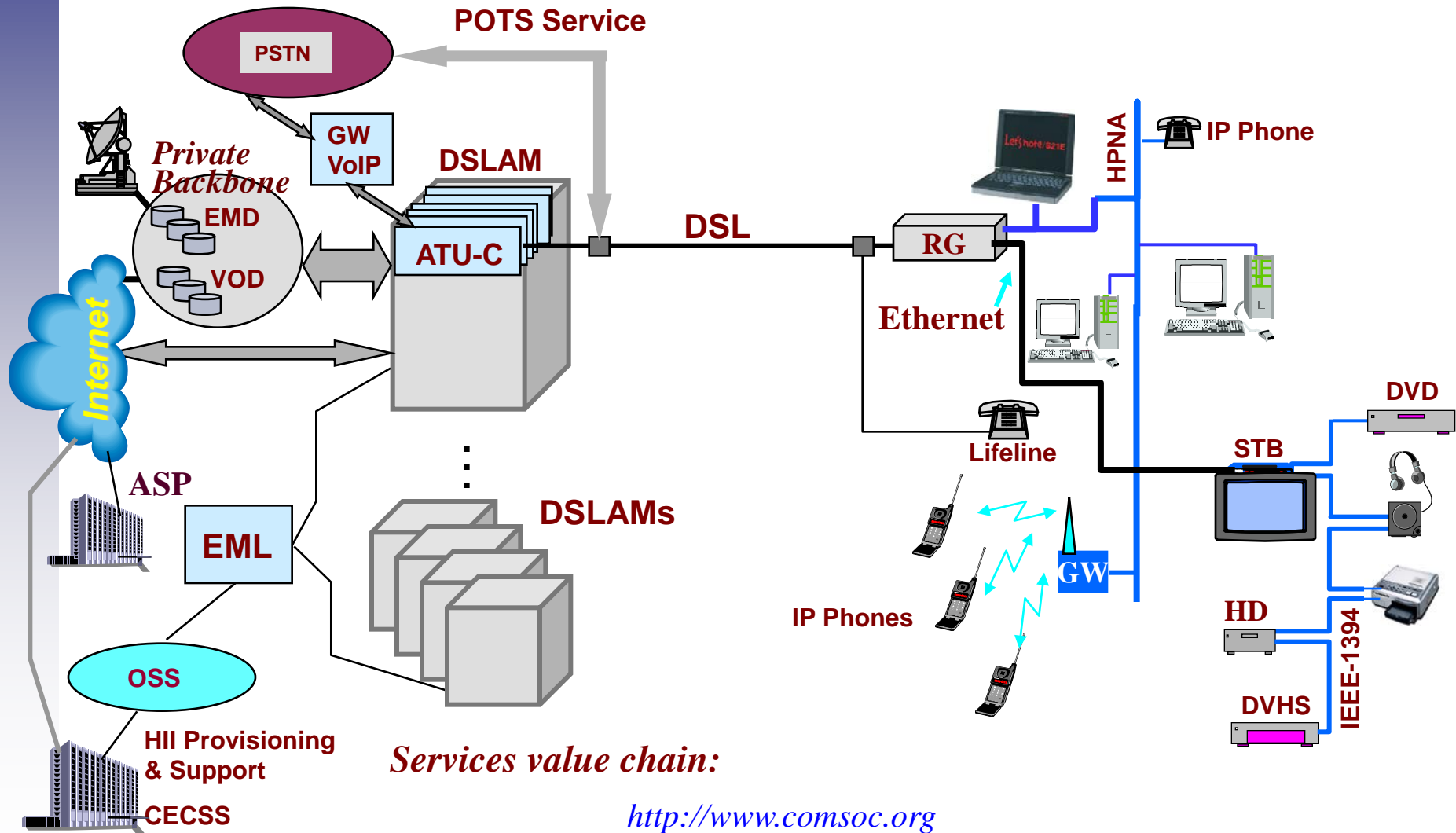
- IP/DOCSIS
- VoIP
- Home Networking





Consumer Communications and Networking

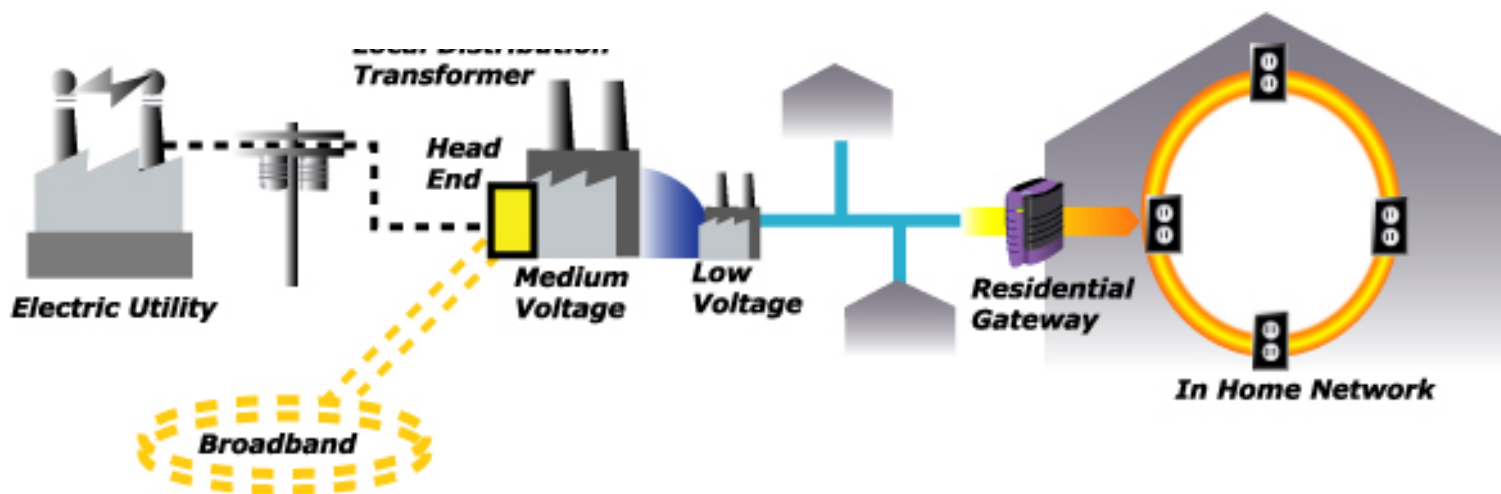
Video-Voice-Data/IP/DSL Communications Scenario





The Third Wire

Broadband Power Line Access Service



Courtesy: Enikia, Inc.

<http://www.comsoc.org>



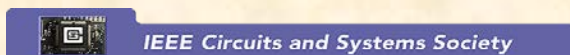
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Publications Partnerships




IEEE

IEEE Transactions on Multimedia



*IEEE
Signal Processing Society*

 **IEEE Communications Society**


**IEEE
COMPUTER
SOCIETY**

IEEE/ACM Transactions on Networking



SIGCOMM

**Internet Computing
online**


**IEEE
COMPUTER
SOCIETY**

Publisher



IEEE Communications Society

*Technical
Cosponsor*



IEEE Multimedia


**IEEE
COMPUTER
SOCIETY**

Publisher



IEEE Communications Society

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Conference Partnerships



IEEE INFOCOM

The Conference on Computer Communications



MILCOM

- IEEE Communications Society
- Armed Forces Communications and Electronics Association



IEEE/Communications Society



IEEE/Lasers and Electro-Optics Society



Optical Society of America

ICME'2000



IEEE Circuits and Systems Society

IEEE
Signal Processing Society



IEEE Communications Society





Society relations Council

New Initiatives



PLC

ComMag FT on Power Line Communications has been produced
JSAC Special Issue is in early stage

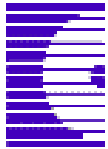
Consumer Communications and Networking

ComSoc has launched a new
Consumer Communications and Networking Conference
Inaugural conference CCNC'2003 will take place in Las
Vegas on January 5-8 in Conjunction with Consumer
Electronics Show (CES), which draws 100,000 attendees
<http://www.ccnc2004.org>

Standards

We are in discussion with IEEE-SA and WWRF on ComSoc
Sponsorship of standardization of next generation wireless
Technologies and associated technical activities.
A joint (ComSoc – WWRF) wireless workshop takes place on October
30 in NYC

<http://www.comsoc.org>



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Sister Societies Board



*Global Market and Globalization of the Industry
requires Globalization of COMSOC*

*National Societies are in the position to contribute
to the Industry's Globalization Process and help ComSoc
by using their experience and knowledge of local markets
and Industries, familiarity of local talent and access to
Local governments*

*ComSoc Chapters can and should play important role
In joint projects with Related and Sister Societies
Globally*



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Sister Societies



- **BRAZIL** Sociedade Brasileira de Telecomunicacoes (SBrT)
- **CHINA** China Institute of Communications (CIC)
- **CHINA** The Chinese Institute of Electronics (CIE)
- **CROATIA** Croatian Information and Communications Society
- **FRANCE** Societe Des Electriciens et Des Electroniciens (SEE)
- **GERMANY** Verband Deutscher Elektrotechniker/Informations-Technische Gesellschaft
- **INDIA** The Institute of Electronics and Telecommunications Engineers (IETE)
- **ISRAEL** Association of Engineers and Architects- Communications Group (AEAI)
- **ITALY** Associazione Elettrotecnica ed Elettronica Italiana (AEI)
- **JAPAN** The Institute of Electronics, Information and Communication Engineers
- **KOREA** The Korean Institute of Communication Sciences (KICS)
- **LATVIA** Latvian Informtains Technology and Telecommunications Association(LITTA)
- **RUSSIA** The Russian Popov Society for Radio Engineering, Electronics&Communications
- **SLOVENIA** Slovenian Radioengineering Society
- **TAIWAN** Chinese Institute of Electrical Engineering (CIEE)
- **VIETNAM** The Radio & Electronics Association of Vietnam (REV)
- **Czech and Slovak Society**
- **Hungary** HTE

<http://www.comsoc.org>



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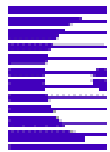
Sister Societies



In 2000-2003 SRC focused on engaging old-new societies in “new” countries in redefined Eastern Europe and Asia.

New Sister Society agreements have been signed with Slovenia, Croatia

At the Sister Society Summit at GLOBECOM'2003 new agreements with Eastern European Societies are planned



Society Relations Council

Sister Societies Summits



Yokohama, July 20-22, 2000



Singapore Summit, July 24-25, 2000



Budapest Summit

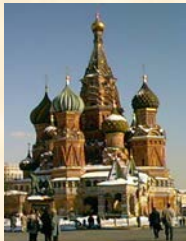


Taipei Summit at Globecom'2002



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Society Relations Partnership Examples



Moscow Internet'99



IEEE Communications Society



RPS



Region-8



JCN



AIEI Korean Institute of
Communications Sciences
(KICS)



IEEE Communications Society



IEEE COMMUNICATIONS SOCIETY
Society Relations



Let us cooperate and help each other, but.....



<http://www.comsoc.org>



Thank You, SF Chapter !!!

I look forward to working in
Membership Development area
in 2004-2005