

Remaining Schedule

- 1/25, 1/28, 2/1
 - course evaluation survey planned on 2/1

Evaluation Method

- Interim and Final Report
- Attendance is not Checked, but, ...
- Questions or Comments are Mandated
 - In the quarter, questions or comments **with technical content** must be made **at least twice during lecture (may be in Japanese)**
 - Good questions and comments will be awarded with points
 - Declare your name and student ID, if you make questions or comments

Evaluation with Zoom

- questions/comments should be asked/made by **oral** interruption (**not** by chat)
 - raising hand by zoom is hard to be noticed unless dedicated chair is assigned
 - don't hesitate to interrupt my talk
 - questions/comments over chat is too easy
- name/ID and points are declared and given through chat
 - use private chat, **if** you don't want **your ID publicly viewed**

For Better Vocal Communication with Zoom

- echo cancellation of zoom is, seemingly, not very good
- it is strongly recommended to turn off speakers and use head/ear phones (should be available at 100-yen shops)

Advanced Lecture on Internet Applications

11. Revolution by the Internet

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How the Internet Began in Japan?

- avoid regulations by “Telecommunications Business Act”
 - Article 1 The purpose of this Act is to ensure that telecommunications services are provided smoothly, and the interests of the users of the services are protected, through **making the operation for telecommunications services proper and reasonable** and promoting the fair competition in telecommunications business in consideration of the **public nature of telecommunications business**, thereby ensuring the sound development of telecommunications and the convenience of the lives of the people, and increasing the public welfare.
 - at that time, international communication **business** was strongly regulated
- academic experiment is **NOT BUSINESS**
 - started as such experiment by WIDE project

Regulation Structure of Japan

- Constitution
- Treaty
- Act (法)
- Cabinet Order (政令)
 - issued by cabinet, approved by all ministries
- Ministerial Order (省令)
 - issued by a ministry

Degree of Regulations

- license, permission (許可)
 - inspected by government, may be rejected
- registration (登録)
 - must be recorded by government
- notification (届出)
 - may just submit

Database of Japanese Regulations

- https://elaws.e-gov.go.jp/search/elawsSearch/elaws_search/lsg0100/
 - includes all acts and orders in Japanese including old (obsoleted or amended) ones
- <http://www.japaneselawtranslation.go.jp/>
 - includes current major acts and orders in English
- many slides will be in Japanese with English explanation

わが国でのインターネット の始まり

- 電気通信事業法の規制をくぐりぬける必要
 - 第一条 この法律は、電気通信事業の公共性にかんがみ、その運営を適正かつ合理的なものとするとともに、その公正な競争を促進することにより、電気通信役務の円滑な提供を確保するとともにその利用者の利益を保護し、もつて電気通信の健全な発達及び国民の利便の確保を図り、公共の福祉を増進することを目的とする。
- 実験なら事業ではないので規制なし
 - WIDEプロジェクトによる実験として開始

What is Revolution?

- fundamental change on social systems
- existing order is destroyed
- usually, old rulers are killed
 - sometimes, only loss all the previledges and properties
- accompanied by constitutional changes of laws

What is IT Revolution?

- accompanied by constitutional changes of laws
- IC disintermediation by internet
- old rulers are legacy IC networks
 - to disappear
- internet is the only IC infrastructure
 - homes are persistently connected to internet
 - communication over internet is naturally inexpensive, flat rated and high speed

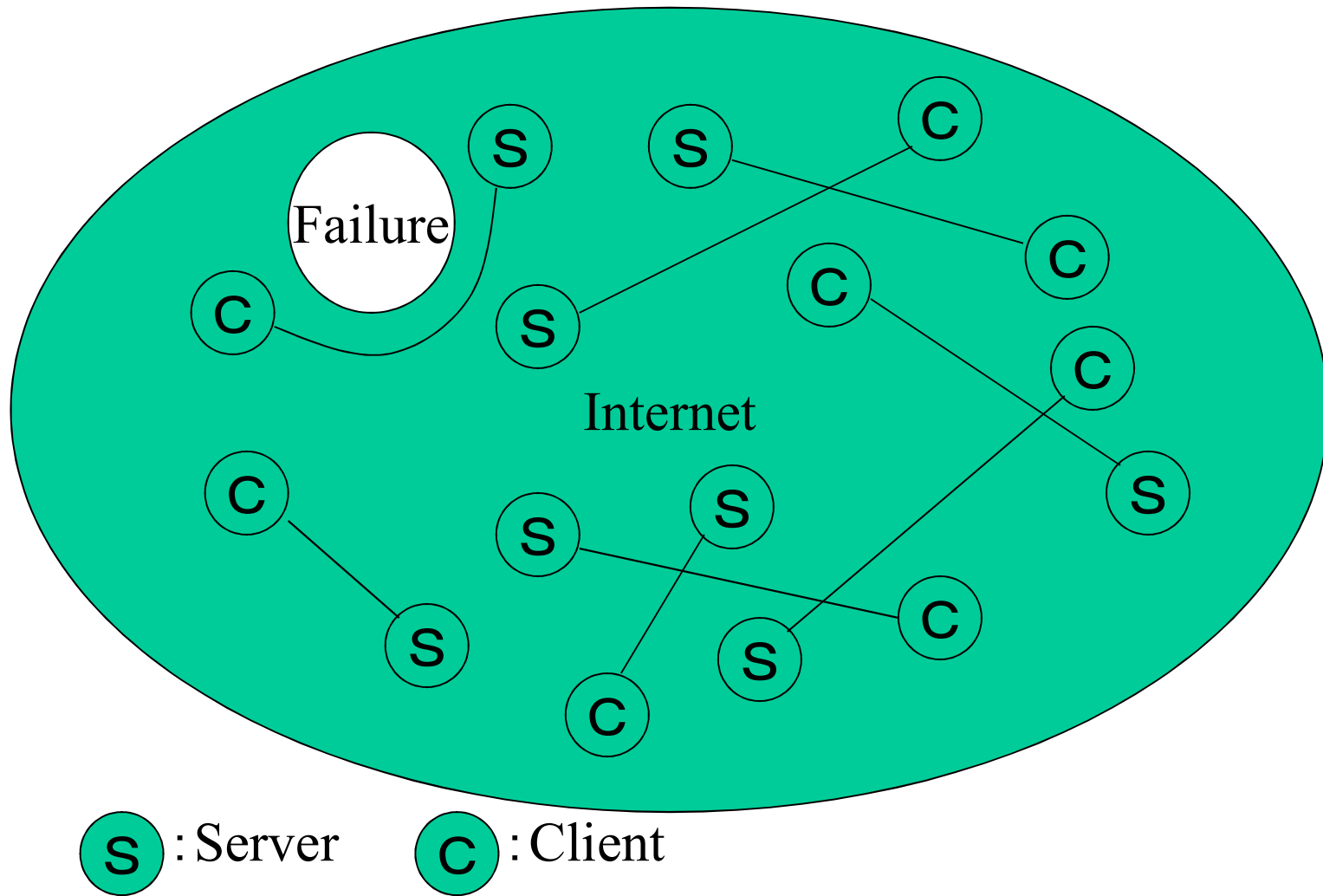
BTW, What is the Internet?

- Not e-mail
 - seriously thought so 20 years ago
- Not web, either
 - many still misunderstand so
- Is not applications
- The Internet is a network directly connecting terminals based on the principle of the Internet using IP (Internet Protocol)

End to End Principle

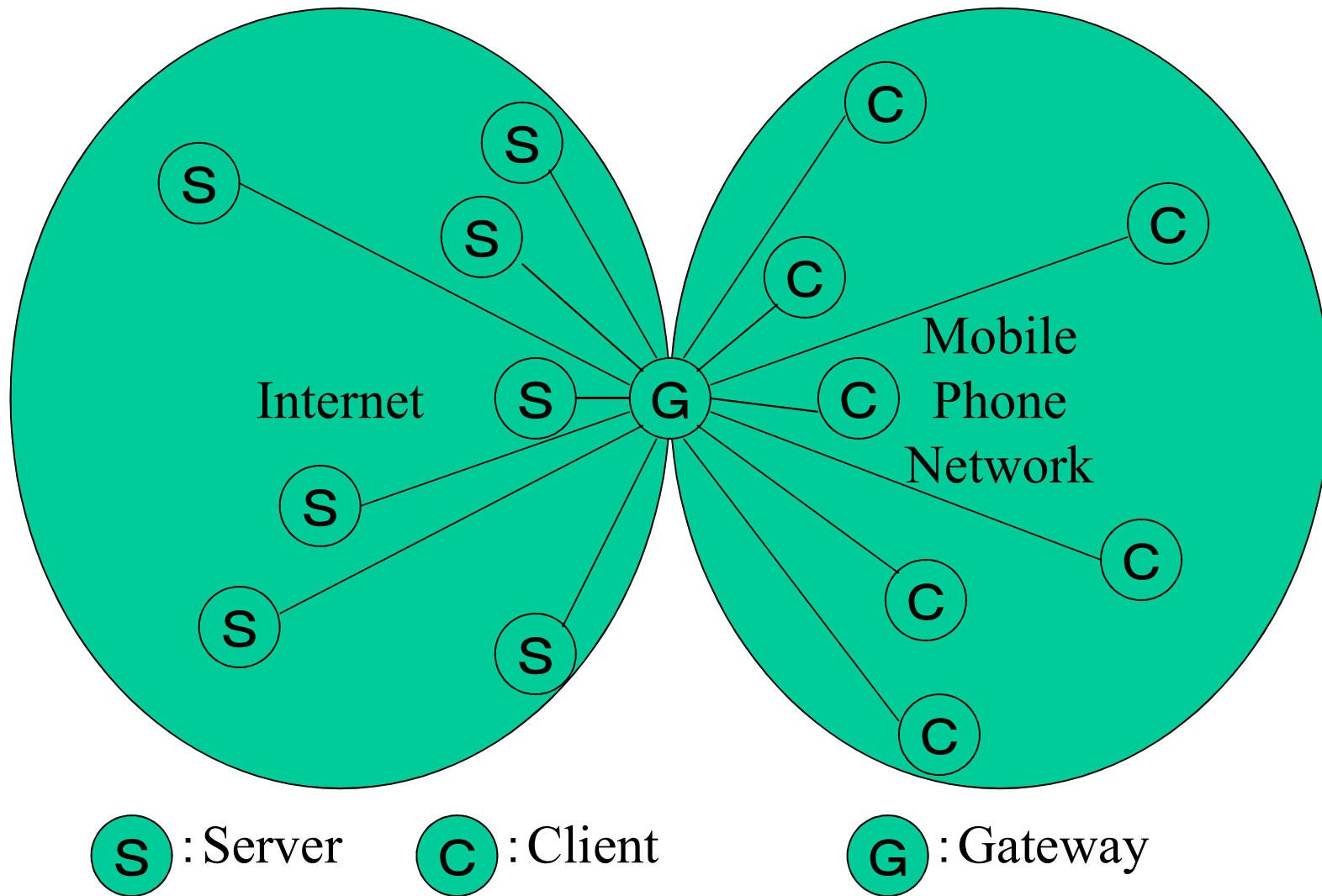
Disintermediated Networking

- Implement things by terminals (end) not by the network
 - network equipment has only single function (to connect terminals) and is high speed
- Implement things by directly involved terminals without involving other terminals
 - scalable (no load concentration)
 - highly reliable (system works if only terminals are working and can communicate each other over some route)



Internet

Servers and clients are mixed and communicate with shortest pathes



Web Browsing from Mobile Phone Network

Servers and clients are separated and communicate through the gateway

Society after IT Revolution

- price destruction of ICN by internet
 - publishing, financial, phone and broadcast networks will disappear
 - IC cost of the society decreased
 - ISP business itself is not profitable
- publishing, financial, phone and broadcast services will:
 - remain, but, on the Internet
 - social activities increase

Publishing Network

- Mass Distribution of Same Information
- Delay of the Distribution may be Tolerated
- Protected by Copyright Act
- The First Victim of the Internet
 - Collapsing

Financial Network

- Manage Transfer of Money
- Partly, Physical Distribution Network, but, today, mostly ICN
- Security!!!
 - Not that there is no accident
 - Who will pay the loss on accidents

Phone Network

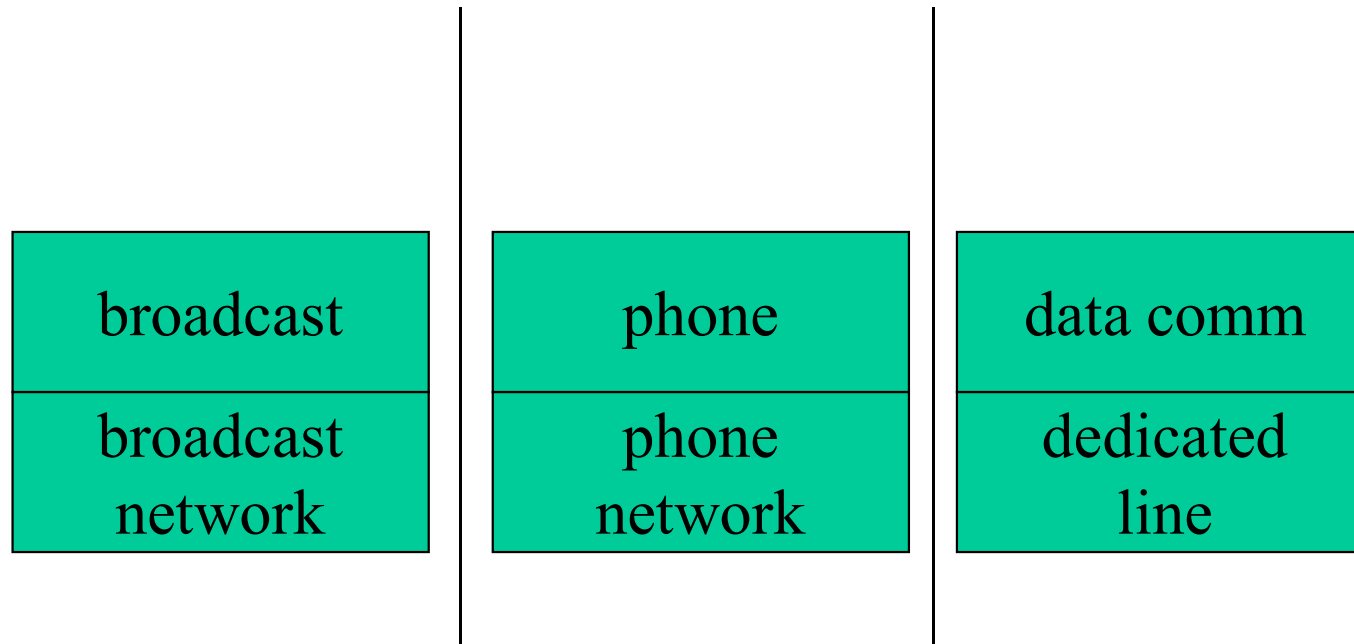
- Network for Realtime Voice Transfer
 - Allocate bandwidth for voice transfer
 - Minimize (guarantee) delay for voice transfer
- Dedicated line service may be Offered
 - but, primary service is voice transfer
- Slow and Expensive
- Was monopolized by national company
 - Liberated by Telecommunication Business Act

Broadcast Network

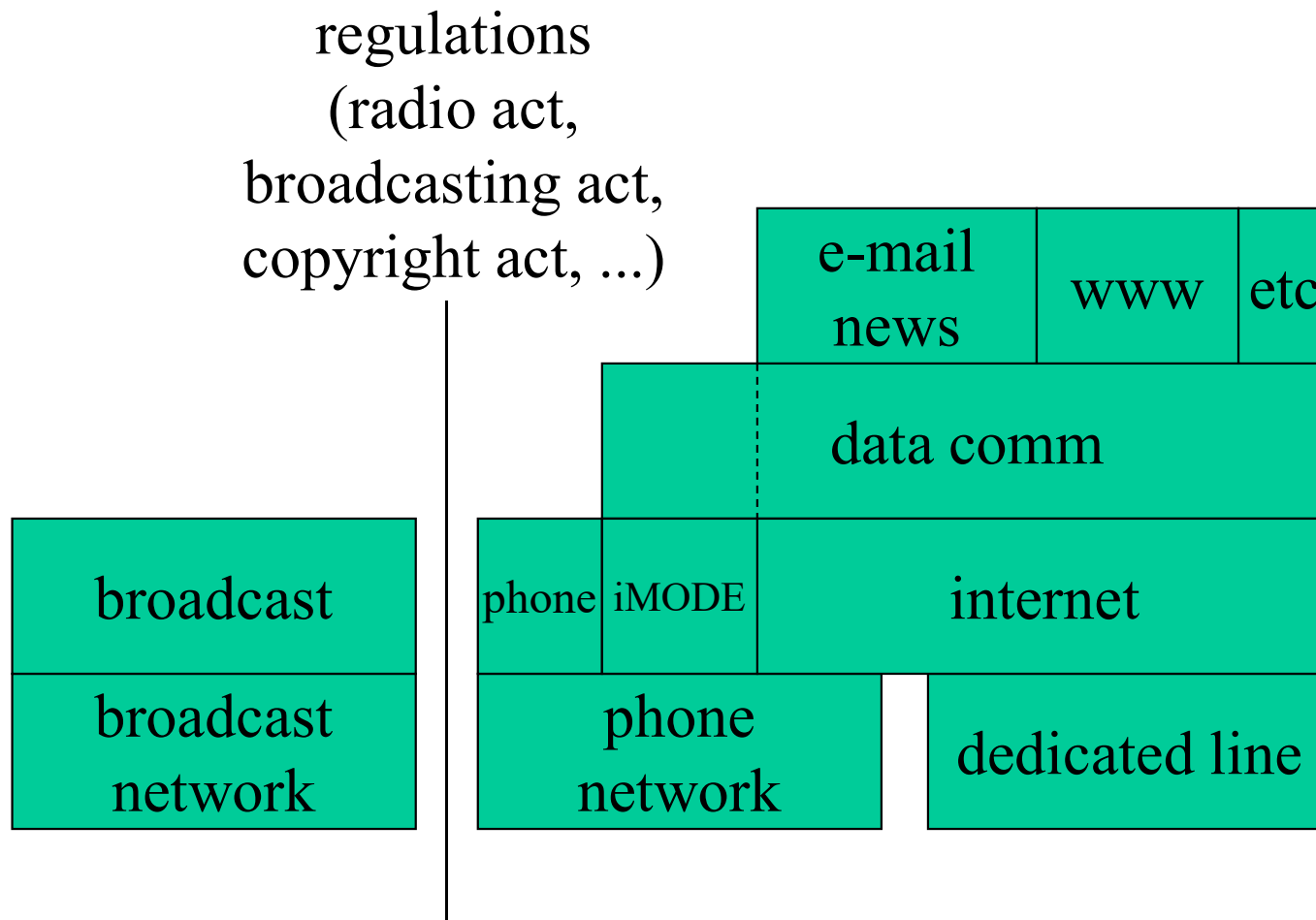
- Network to Transfer Voice/Image to Many in Realtime
 - Allocate bandwidth for the transfer
 - Minimize delay
- Wide Area One to Many Communication over Radio Waves
 - Broadcast/Multicast
- protected by broadcast, radio and copyright acts

regulations
(radio act,
broadcasting act,
copyright act, ...)

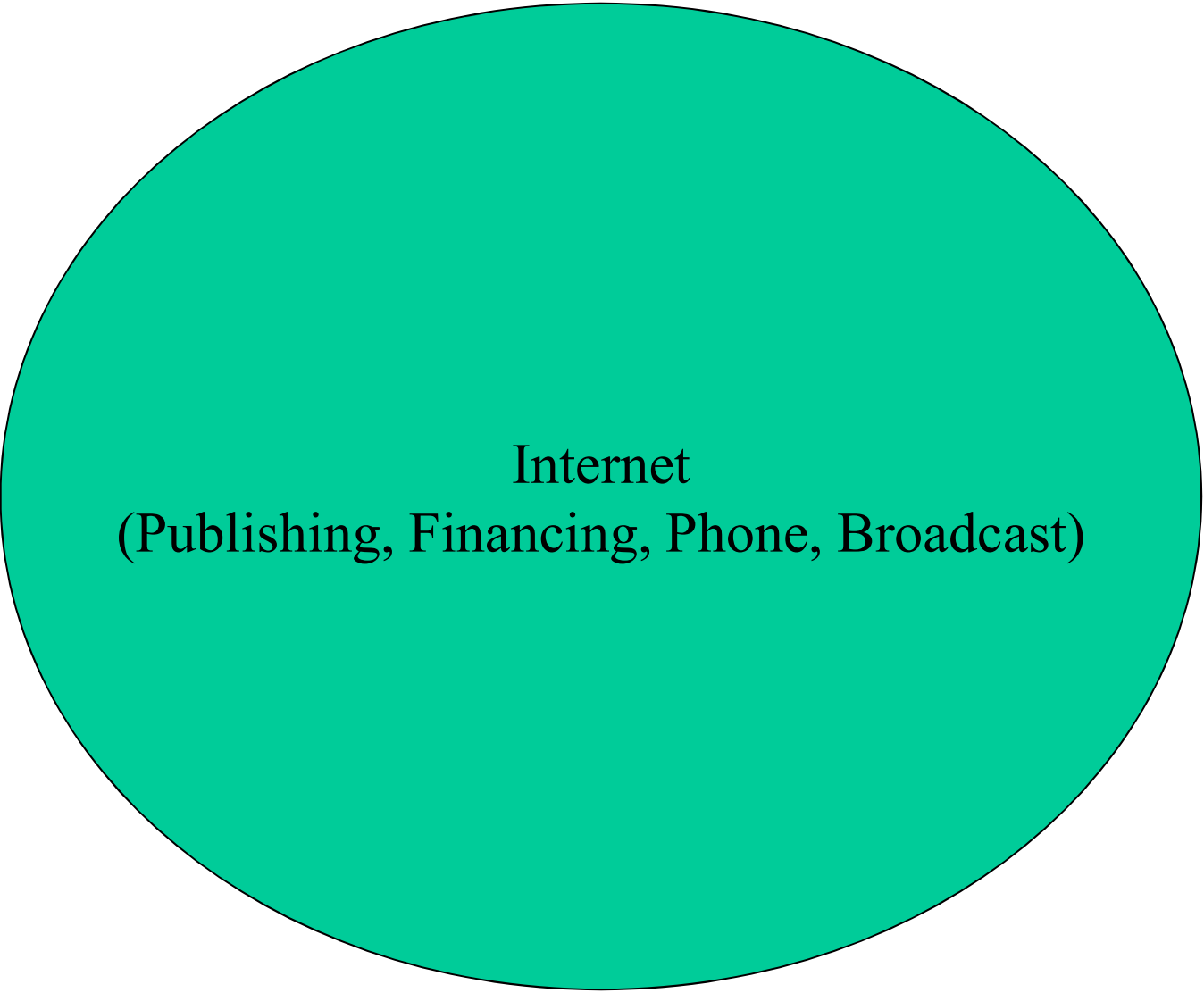
regulations
(public telecommunication act
forces monopoly by NTT)



networks before the Internet



networks with the Internet



Internet
(Publishing, Financing, Phone, Broadcast)

Integration of IC Services by the Internet

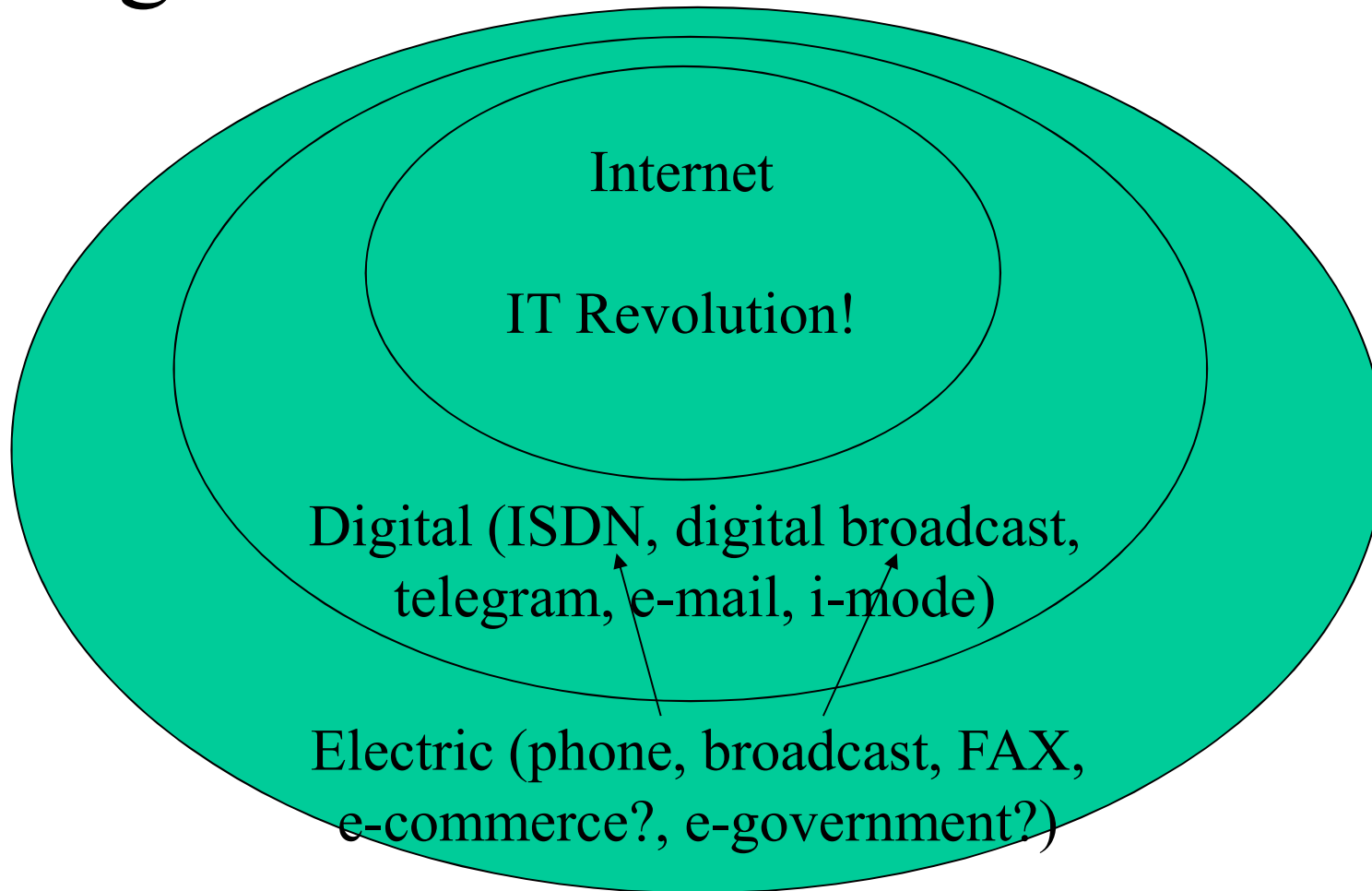
broadcast	phone	e-mail news	www	etc
streaming		data comm (batch)		
internet				
dedicated line (including wireless)				

network in the future

Digitization \neq Internetworking

- digitization
 - complex processing possible by noise removal
 - signal fire, type, telegram, ATM, ISDN, digital broadcast, ...
- internetworking
 - use IP end to end
 - unify information/telecommunication networks

Internetworking, Digitization and Electronization



書面交付義務の撤廃？

行政手続等における情報通信の技術の利用に関する法律

- 書面のかわりに電磁的記録を使う
 - 単なる電子化
 - FAXによる提供は情報通信技術を利用した電磁的方法による提供
 - 電話による提供も情報通信技術を利用した電磁的方法による提供
- IT革命とは無関係
 - 100年前にやるべきだった？

Elimination of Obligations to Issue Papers?

use of telecommunication technology for administrative procedure act

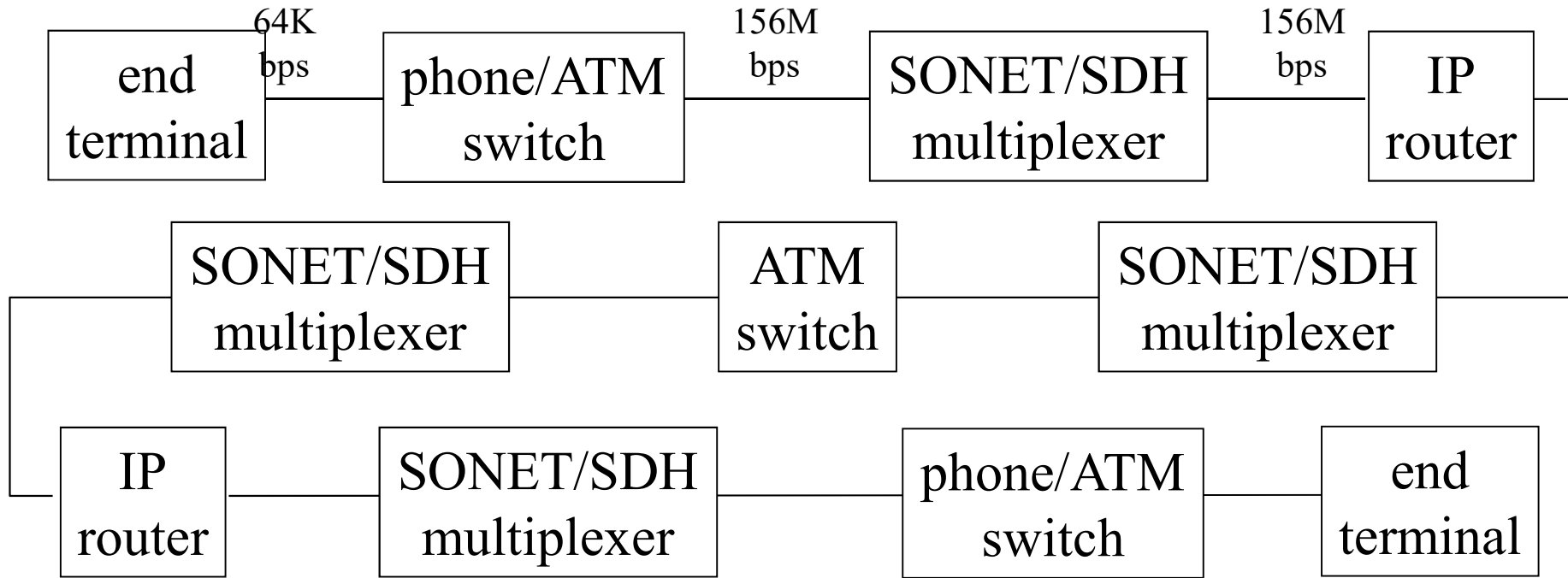
- use EM record instead of papers
 - merely to be electrical
 - FAX use telecommunication technology
 - phone use telecommunication technology
- unrelated to IT revolution
 - should have been done 100 years ago?

Society with Full Fuleged Internet

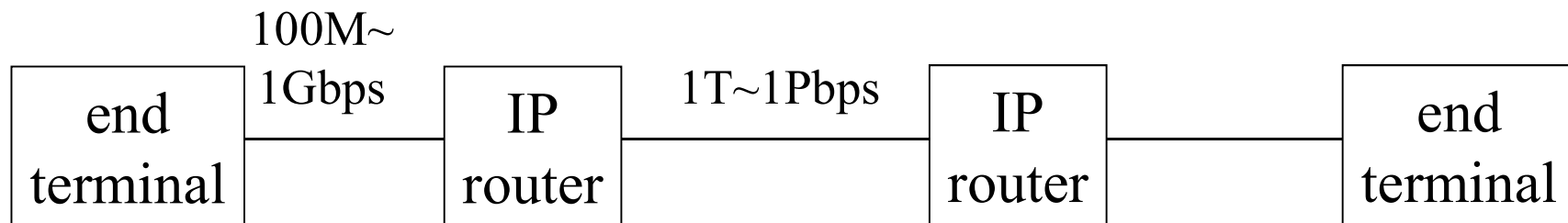
- persistent connectivity to internet realized
 - offices and homes are directly connected to internet
 - servers to offer information can be placed at offices and homes
- direct internet connectivity means
 - speed and pricing unrelated to tradition of phone network (10 yen for 3 minuits local call at 64kbps)

Public Telecommunication Act

- WAN is monopolized by NTT
 - regulation necessary for universal service?
 - similar to PTT in Europe, natural monopoly by AT&T in US
- WAN is primarily for voice (64kbps)
- broadband technology developed for LAN
 - Ethernet!
- as WAN became less regulated, LAN technology overwhelmed WAN technology



a) the Internet over phone network infrastructure



b) the Internet as the infrastructure

電気通信事業法の成立

- 電気通信事業を開放
 - 伝送路をもつ第一種事業者(認可制)
 - 伝送路をもたない第二種事業者(届出制)
- ちょっと前までの第一種事業者は様々な義務を負う
 - 公益特権ももつ

Public Telecommunication Act Replaced by Telecommunication Business Act

- telecommunication business demonopolized
 - licensing for class 1 with its own transmission lines longer than 5km
 - otherwise, notification for class 2
 - registration for special class 2
 - long distance and international (was obstacle to internet)
- class 1 has various obligations
 - and some privileges
 - e. g. to forcibly use land of others

ちよつと前の電気通信事業法

第九条

- **第一種**電気通信事業を営もうとする者は、総務大臣の**許可**を受けなければならない
- 2 前項の許可を受けようとする者は、総務省令で定めるところにより、次の事項を記載した申請書を総務大臣に提出しなければならない
- 3 前項の申請書には、事業計画書その他総務省令で定める書類を添付しなければならない

Current Telecommunication Business Act

- basically, registration
 - may be approved for privileges
- notification for small business
- not very different from original act
 - Softbank ADSL with millions of users was class 2 because transmission lines were borrowed from others (NTT)

今の電気通信事業法 第九条

- 電気通信事業を営もうとする者は、総務大臣の登録を受けなければならない。ただし、その者の設置する電気通信回線設備の規模及び当該電気通信回線設備を設置する区域の範囲が総務省令で定める基準を超えない場合は、この限りでない。

Current Telecommunication Business Act

- Article 9 A person that intends to operate a telecommunications business must obtain a **registration** from the Minister for Internal Affairs and Communications; provided, however, that this does not apply to the following cases:

今の電気通信事業法 第一百十七条

- 電気通信回線設備を設置して電気通信役務を提供する電気通信事業を営む電気通信事業者又は当該電気通信事業を営もうとする者は、次節の規定の適用を受けようとする場合には、申請により、その電気通信事業の全部又は一部について、総務大臣の認定を受けることができる。

Current Telecommunication Business Act

- Article 117 (1) If a telecommunications carrier operating a telecommunications business in which it runs telecommunication line facilities and provides telecommunications services or a person intending to operate such a telecommunications business intends to have the provisions of the following Section applied to it, it **may obtain approval** from the Minister for Internal Affairs and Communications for the telecommunications business in whole or in part by the way of an application.

今の電気通信事業法 第二百 十九条

- 前条第一項の規定による協議が調わないとき、又は協議をすることができないときは、認定電気通信事業者は、総務省令で定める手続に従い、その土地等の使用について、総務大臣の裁定を申請することができる。ただし、同項の認可があつた日から三月を経過したときは、この限りでない。

Current Telecommunication Business Act

- Article 129 (1) If negotiations conducted pursuant to the provisions of paragraph (1) of the preceding Article fail or cannot be conducted, **an approved telecommunications carrier may**, in accordance with the procedures specified by Order of the Ministry of Internal Affairs and Communications, **apply to the Minister for Internal Affairs and Communications for a ruling concerning the use of the land, etc.**; provided, however, that this does not apply to cases in which three months have passed since the date on which the authorization set forth in the same paragraph was granted.

ちよつと前の電気通信事業法

- 第二十二條 一般第二種電気通信事業を営もうとする者は、総務省令で定めるところにより、次の事項を記載した書類を添えて、その旨を総務大臣に届け出なければならない。
- 第二十四條 特別第二種電気通信事業を営もうとする者は、総務大臣の登録を受けなければならない。

今の電気通信事業法

- 第十六条 電気通信事業を営もうとする者（第九条の登録を受けるべき者を除く。）は、総務省令で定めるところにより、次の事項を記載した書類を添えて、その旨を総務大臣に届け出なければならない。

Current Telecommunication Business Act

- Article 16 (1) A person (except a person that should obtain registration as set forth in Article 9) that intends to operate a telecommunications business must, pursuant to the provisions of Order of the Ministry of Internal Affairs and Communications, **file a notification** with the Minister for Internal Affairs and Communications to that effect by attaching documents describing the following particulars:

ちよつと前の電気通信事業法

第二十一条 3

- **特別第二種電気通信事業**は、電気通信設備を不特定かつ多数の者の通信の用に供する第二種電気通信事業であつて当該電気通信設備が、自らの電気通信役務の提供に用いる**他の電気通信事業者の専用通信回線を介して公衆通信回線設備を相互に接続して電気通信役務を提供できるように構成されているもの及び本邦外の場所との間の通信を行うための電気通信設備を他人の通信の用に供する第二種電気通信事業とする。**

Service (Business?) Model for the Internet Era

- client server model (BtoB, BtoC)
 - use web browsers on dial-up terminals
 - information provided by servers with persistent connectivity
 - server is maintained by special ISPs
- peer to peer model will be popular
 - anyone can provide information with persistent connectivity
 - ISPs just carry packets
 - cloud?

Disintermediation of Phone Network by IT Revolution

- publishing network is collapsing partly because of P2P file exchanges
- the next target is (was) phone network
 - internet backbone speed exceed that of phone network at around 2000
- with peer to peer model, phone can not be profitable
 - phone will be free (was obvious in 2000)

NTT (incl. Docomo)

- loss phone business
 - must have reduced # of employees
- was acting against ADSL for ISDN
- now involved in internet business
- still insisting on phone business
 - NGN, 5G etc.

Regulate Phone over the Internet?

- why regulate?
 - voice quality?
 - through telephone number?
 - because its lifeline?

Regulation by Telephone Number

- assign telephone number only when regulating condition is followed
- internet terminals are
 - identified primarily by IP addresses
 - domain names are also useful
 - identification by telephone number may be possible but is not necessary
- to received call from PSTN to internet
 - dial-in capability of PSTN is enough
 - assign many telephone numbers to a gateway

Is Telephone Lifeline?

- power must be supplied from telephone station to analog phones
 - ISDN phones also receive power
 - not enough for TA (terminal adapter)
 - TA can not be used upon power failure
 - some TA have slot for optional battery
- mobile phone has batteries
 - users are responsible to keep power supply
 - so should internet phone

Disintermediation of Broadcast Network by IT Revolution

- was difficult
 - TV needs more bandwidth than phone
 - radio wave is strongly regulated
- currently
 - broadband by optical fiber is the reality
 - more radio wave band is for communication
 - frequency auction?

Major Acts for Broadcast

- radio act
 - how to allocate radio wave bands
- broadcasting act
 - what is broadcast business
- copyright act
 - broadcaster has some right related to copyright
 - e. g. permit retransmission of broadcast content

総務省による 情報通信法制の統合の試み

- 放送法と放送法類似法の統合
 - 放送法、有線放送電話に関する法律、有線テレビジョン放送法、電気通信役務利用放送法
- ついでに、電気通信事業法も統合？
 - ウェブコンテンツの規制による権益拡大
 - 失敗（ISPや経済産業省の反発？）
 - 電波を占有するわけではなく、規制の根拠もない
- 放送法類似法は放送法に統合された

Unification Attempt of ICT Acts by Ministry of Internal Affairs and Communications

- unify broadcast act and acts for broadcast-like service
 - wired broadcast and broadcast by telecommunication service (such as CS)
- unify telecommunication?
 - regulate web contents like broadcast contents!
 - failed (ISP and METI acted against)
 - no reason to regulate

電波法 第一条

- この法律は、電波の公平且つ能率的な利用を確保することによつて、公共の福祉を増進することを目的とする。

Radio Act

- Article 1 The purpose of this Act is to promote the public welfare by ensuring the fair and efficient utilization of radio waves.

電波法 第四条

- 無線局を開設しようとする者は、総務大臣の**免許**を受けなければならない。ただし、次の各号に掲げる無線局については、この限りでない。
 - 一 発射する電波が著しく微弱な無線局で総務省令で定めるもの
 - 二 市民ラジオの無線局
 - 三 空中線電力が〇・〇ーワット以下である無線局のうち総務省令で定めるものであつて
 - 、、、

Radio Act Article 4

- Any person who wishes to establish a radio station must obtain a **license** from the Minister of Internal Affairs and Communications. However, this does not apply to radio stations listed in the following items:
 - (i) radio stations operating with extremely low power of emission and specified by Order of the Ministry of Internal Affairs and Communications
 - (ii) radio stations that operate in the frequency band of 26.9 through 27.2 MHz with antenna power of 0.5 watts or less ...
 - (iii) radio stations with antenna power of 1 watt or less as specified by Order of the Ministry of Internal Affairs and Communications, ...

電波法 第六条

- 第六条 無線局の免許を受けようとする者は、申請書に、次に掲げる事項を記載した書類を添えて、総務大臣に提出しなければならない。
- 2 基幹放送局(略)の免許を受けようとする者は、前項の規定にかかわらず、申請書に、次に掲げる事項(略)を記載した書類を添えて、総務大臣に提出しなければならない。

Radio Act Article 6

- (1) Any person who wishes to obtain a radio station **license** must submit an application to the Minister of Internal Affairs and Communications along with a document, on which the following information are entered:
- (2) Any person who wishes to obtain **a core broadcast station license** () notwithstanding the provisions of the preceding paragraph, must submit an application to the Minister of Internal Affairs and Communications along with a document in which the following information are entered ():

Broadcasting Act Article 1

- The purpose of this Act is to regulate broadcasting so as to conform to standards for public welfare and to facilitate the sound development of broadcasting in accordance with the following principles:
 - (i) Guaranteeing that broadcasts reach as much of the general public as possible and that the benefits derived from broadcasts are fully realized;
 - (ii) Ensuring freedom of expression in broadcasting by guaranteeing impartiality, truth and autonomy; and
 - (iii) Enabling broadcasting to contribute to the development of healthy democracy by clarifying the responsibilities of persons involved in broadcasting.

Old Broadcasting Act Article 2 (i)

- (i) the term "broadcasting" means the act of radio transmission intended to be directly received by the public;
 - in Japanese, 「放送」とは、公衆によって直接受信されることを目的とする無線通信の送信をいう。
 - current definition include broadcasting by cable and telecommunication services (CS (Communication Satellite) and IP multicast)
 - Soumusho insists BS (Broadcast Satellite) and CS are different

Current Broadcasting Act Article 2 (i) (official translation)

- the term "broadcasting" means the act of transmitting (including transmitting using the telecommunications equipment of other persons (meaning the telecommunications equipment provided for in Article 2, item (ii) of the Telecommunications Business Act ()); the same applies hereinafter)) through telecommunications (i) content intended to be received by the public;

Current Broadcasting Act Article 2 (i)

- the term "broadcasting" means the act of transmitting through telecommunications content intended to be received by the public;
- the term "broadcasting" means the act of transmission of telecommunication intended to be directly received by the public;
- 「放送」とは、公衆によって直接受信されることを目的とする電気通信（）の送信（）をいう。

有線放送電話に関する法律

Cable Radio and Phone Act

- 第一条 この法律は、有線放送電話業務の適正な運営を図ることによつて、有線電気通信に関する秩序の確立に資することを目的とする
- 第三条 有線放送電話業務を行おうとする者は、総務大臣の許可(license)を受けなければならない

電気通信役務利用放送法

Broadcast over Telecommunication Service Act

- 第二条 この法律において「電気通信役務利用放送」とは、公衆によって直接受信されることを目的とする電気通信の送信であって、その全部又は一部を電気通信事業を営む者が提供する電気通信役務を利用して行うものをいう
- 第三条 電気通信役務利用放送の業務を行おうとする者は、総務大臣の登録(register)を受けなければならない

Broadcasting over Telecommunication Service Act

- originally legislated to allow broadcast by CS (communication satellite)
 - registration, not licensing (no dedicated radio band)
 - not used for that purpose, because broadcasting act was also amended to allow such broadcast
- was used for broadcast by IP multicast
 - by BB Cable (Softbank group) when Softbank ADSL service started
- now merged to broadcasting act

Broadcast Service After IT Revolution

- anyone can transmit TV broadcast
 - does not mean watched by someone, though
- old broadcast business can survive because:
 - TV stations are the traditional portal
 - business model based on commercial advertisements same
 - but, a lot more regulations on broadcast than phone made broadcast business a lot less flexible than phone business, which is a lot less flexible than internet business

Disintermediation of Publishing Network by IT Revolution

- free file transfer
 - redistribution of documents is free
- free search engines
 - offer indexing/bibliographic service
- P2P file sharing weakening copyright
 - to disappear at least for non-commercial purpose

Who Needs Copyright?

- author?
 - only get 10% or so of sales
 - can survive without copyright
 - live, talk show, comiket, appear on TV, ...
- publishers
 - will be ruined without copyright
- publishers promoting culture should be protected?
 - after IT revolution, culture do not need publishers

Origin of Copyright

- 1445: invention (?) of letterpress printing by Gutenberg
- 1486: publishing patent for a book was granted in Venice
- 1662: copyright granted to **publishers** by royal prerogative in England
- 1710: Statute of Anne in England
 - 14 years of protection for **publishers**

Rights Granted by Copyright Act

- moral rights of authors
 - right to make a work public, right of attribution and right to integrity
- copyright (property right)
 - subdivided to be right of reproduction, right to transmit to the public etc.
- print right (of publishers)
- neighboring rights
 - for performers, producers of phonograms and (cable) broadcasters

Is Free Copying of Copyrighted Materials by Individuals Legal?

- with copyright act of Japan
 - private copying is basically legal
- copyright is highly artificial right
 - rights for producers of phonograms and broadcasters?
 - depends on specific distribution mechanisms
- irrational regulations are often ignored
 - e.g. food control act (on rice) in Japan,
prohibition law (on alcoholic drinks) in US

Copyright Act Article 30

Private Use

- (1) Except in the following cases, **a user may reproduce a work** that is subject to copyright (hereinafter in this Subsection referred to as a "work") if the reproduction is for personal or family use or for any other use of a similarly limited scope (hereinafter referred to as "**private use**");

Copyright Act Article 30

(Cont'd)

- (i) a user reproduces a work by means of an automated duplicator that has been set up for use by the public;
- (ii) the reproduction of the work has become possible due to the circumvention of technological protection measures or a barrier to reproduction of the work no longer arises as a result of that circumvention, and the user reproduces the work in the knowledge of this fact;
- (iii) the work is received via an automatic public transmission that infringes a copyright, and the user records the sounds or visuals of the work in digital format, in the knowledge of this fact.

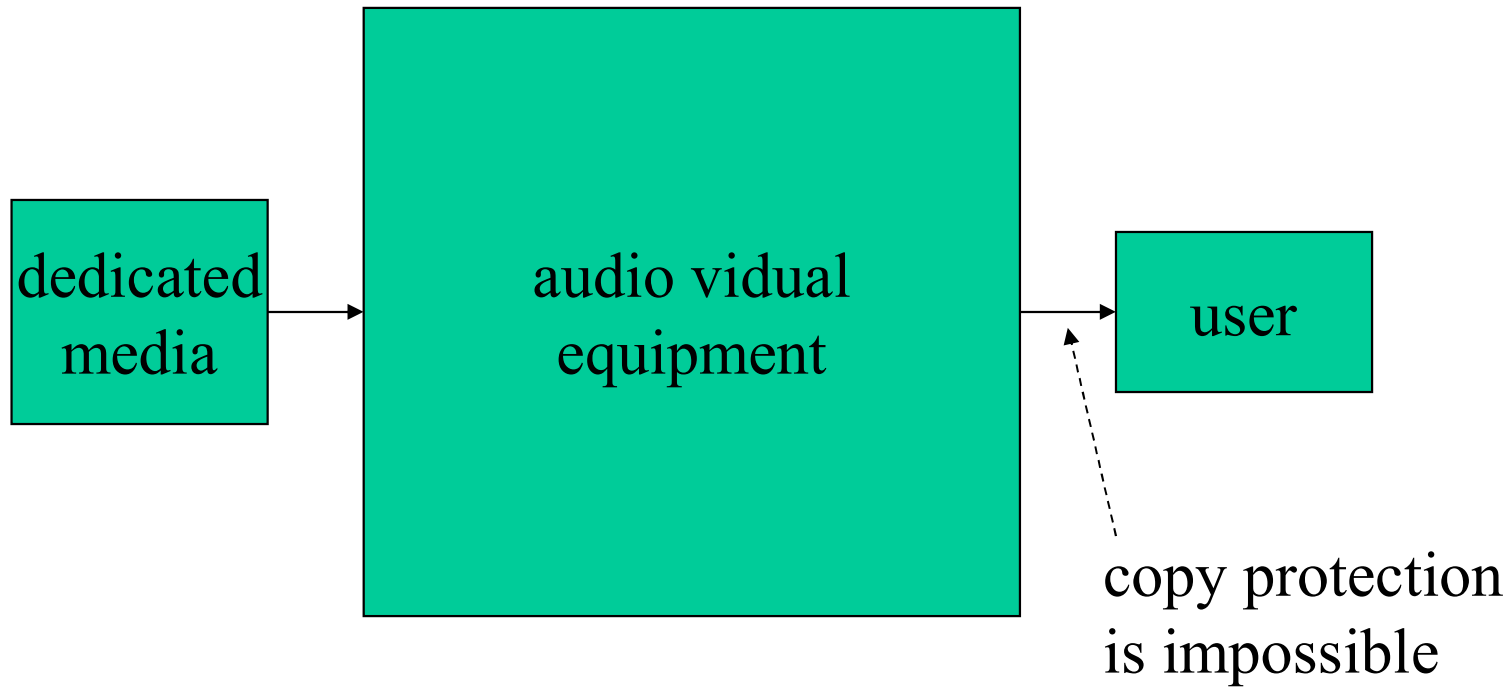
Copyright Act Article 30 (2)

compensation for private use

- (2) A person who, for private use, records the sound or visuals of a work in a digital format, on a digital sound or visual recording medium that is provided for by Cabinet Order, by means of a machine with digital sound or visual recording functions which is provided for by Cabinet Order **must pay a reasonable amount of compensation to the copyright owner.**

Restrictions on Private Reproduction

- prohibition on circumvention of technological protection measures?
 - not meaningful against recoding final analog audio or visual output
- compensation for recoding media?
 - proportional to capacity of media?
 - significance of 1 bit depends on media and encoding



Regulation by Programming Code?

- any complicated regulation possible?
- CPUs should have hardware ID?
 - hardware ID may be changed by emulation

Fair Use in US Copyright Act

- Notwithstanding the provisions of sections 17 U.S.C. § 106 and 17 U.S.C. § 106A, **the fair use of a copyrighted work**, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, **is not an infringement of copyright**. In determining whether the use made of a work in any particular case is a fair use **the factors to be considered shall include**:
 - the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
 - the nature of the copyrighted work;
 - the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
 - the effect of the use upon the potential market for or value of the copyrighted work.
- The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

Is Private Use Right?

Is Fair Use Right?

- private use limits copyright
 - if private use is right
 - copyright and private use right are contradicting rights
 - comparative balancing of rights results in **flexibility of fair use**
 - with limited enumeration interpretation
 - private use is not right but right limitation
 - **no flexible interpretation on restriction** admitted
 - articles to limit copyright do not admit rights because copyright act “**provide for authors' rights and neighboring rights**” and not rights against them

著作権法

- 第一条 この法律は、著作物並びに実演、レコード、放送及び有線放送に**関し著作権者の権利及びこれに隣接する権利を定め**、これらの文化的所産の公正な利用に留意しつつ、著作者等の権利の保護を図り、もって文化の発展に寄与することを目的とする。

Copyright Act

- Article 1 The purpose of this Act is to provide for authors' rights and neighboring rights with respect to works, as well as with respect to performances, phonograms, broadcasts, and cablecasts, and to ensure protection for the rights of authors and other such persons while according attention to the fair exploitation of these cultural products, and thereby to contribute to cultural development.

What's Wrong with Limited Enumeration Interpretation

- articles to limit copyright do not admit rights because copyright act “provide for authors' rights and neighboring rights” and not for rights against them
 - limitations may be based on rights admitted by laws other than copyright act



copyright act

articles on copyright
limitation

≠

admission of right

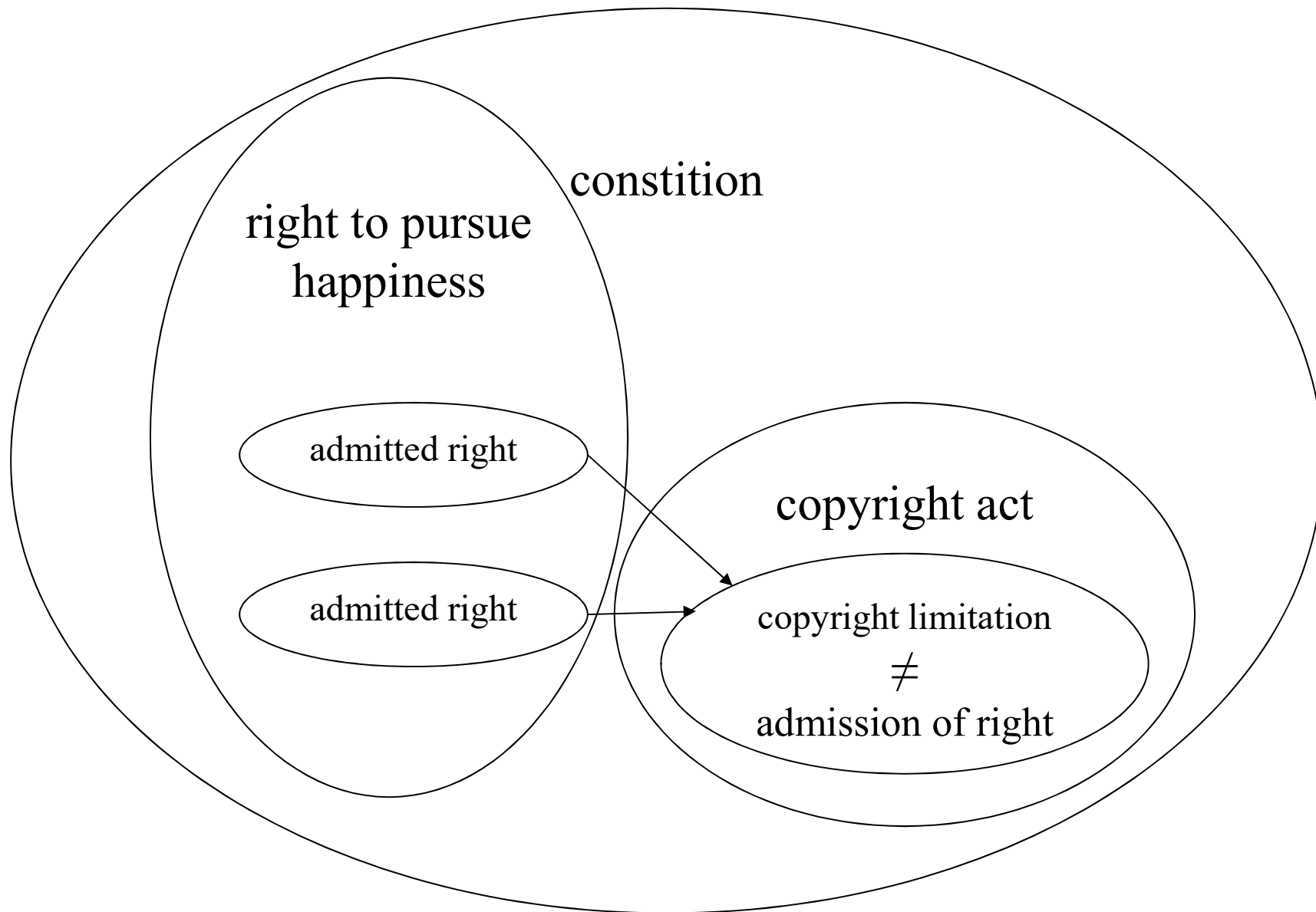
憲法第十三条(幸福追求権)

- すべて国民は、個人として尊重される。生命、自由及び幸福追求に対する国民の権利については、公共の福祉に反しない限り、立法その他の国政の上で、最大の尊重を必要とする。
 - 幸福追求権は非限定列举解釈される
 - 憲法十四条以降に列举される国民の諸権利は、全てを尽くしていない(環境権等)
 - 私的複製権も、理論的には導けなくもないが、、

Constitution Article 13

Right to Pursue Happiness

- All of the people shall be respected as individuals. Their **right to life, liberty, and the pursuit of happiness** shall, to the extent that it does not interfere with the public welfare, be the supreme consideration in legislation and in other governmental affairs.
 - articles 14~40 on rights of people in constitution are not exhaustive, that is, not interpreted as limited enumeration
 - new rights (e.g. for safe and comfortable environment) may be derived from article 13
 - but, may be too much abstract for fair use



文化芸術基本法

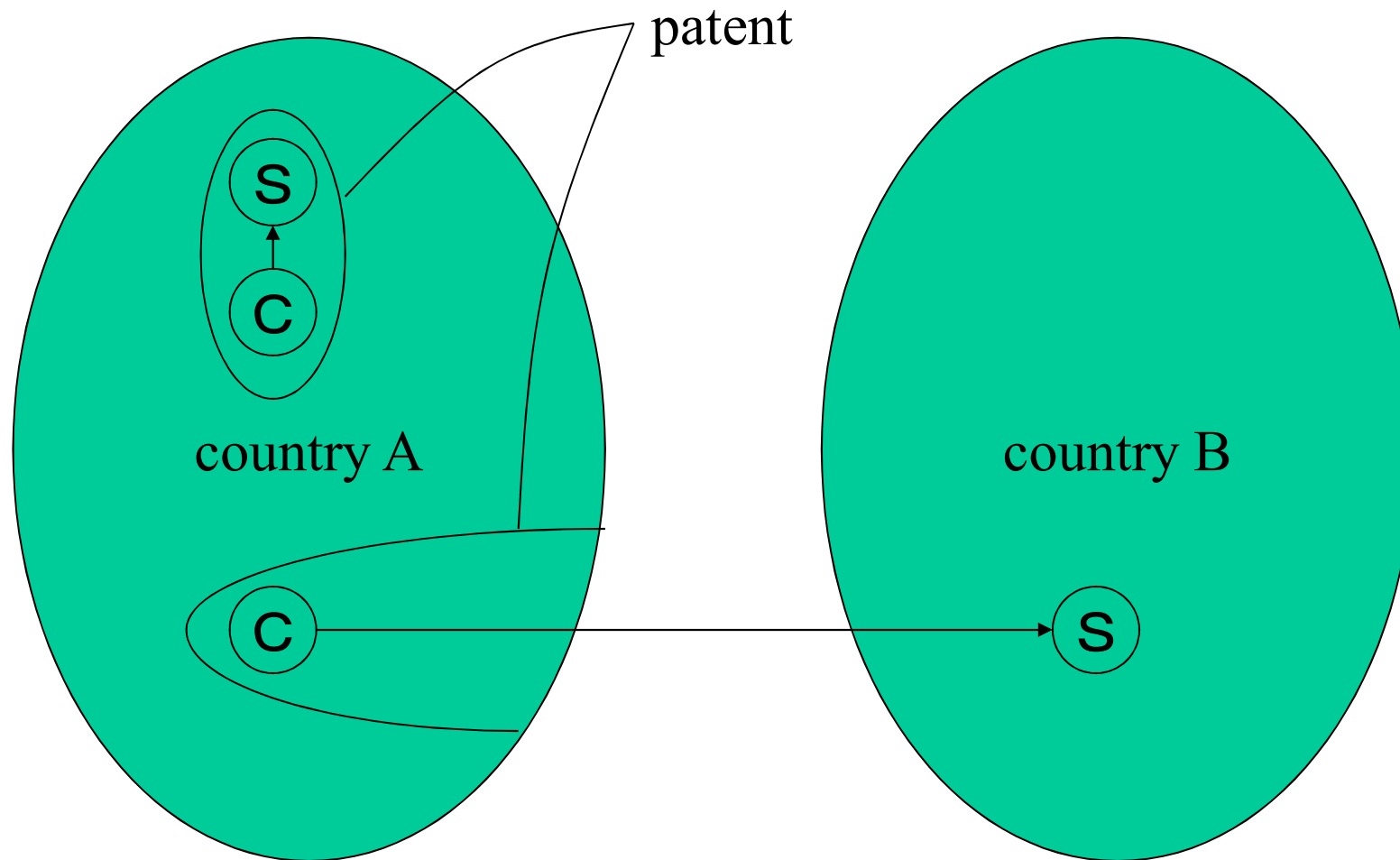
- 第二条 文化芸術の振興に当たっては、文化芸術活動を行う者の自主性が十分に尊重されなければならない。
 - － 3 文化芸術の振興に当たっては、文化芸術を創造し、享受することが人々の生まれながらの権利であることにかんがみ、国民がその居住する地域にかかわらず等しく、文化芸術を鑑賞し、これに参加し、又はこれを創造することができるような環境の整備が図られなければならない。

Basic Act on Culture and Art

- in article 2, clause 3, it is stated that
“creation and enjoyment of culture and art are people’s birthright”
 - enjoyment of culture is right contradicts with copyright
 - fair use of flexible interpretation of copyright limitation should be admitted in Japan (and other countries)

Business Model Patent

- patent on protocol between client and server
- if server is located in overseas?
 - domestic patent is not applicable to server
- patent heaven and copyright heaven may become reality
 - disintermediation of regulations by IT revolution



C : client

S : server

Can Patent on Clients be Protected?

- have patent on client apparatus (software)
 - not a business model patent at all
- practically useless for client downloaded from overseas

Why Patent is Granted?

- artificial right to promote inventions
 - to allow collect investment on research and development
 - entire society will be benefitted after patent expiration (20 years)
- business model patent
 - almost no research and development necessary
 - using new business model before others is, by itself, profitable
 - no reason to protect by patent

特許法 第一条

- この法律は、発明の保護及び利用を図ることにより、発明を奨励し、もつて産業の発達に寄与することを目的とする

Patent Act

- Article 1 The purpose of this Act is to encourage inventions through promoting the protection and utilization of inventions, and thereby contribute to the development of industry.

How the Internet Began in Japan?

- avoid regulations by “Telecommunications Business Act”
 - Article 1 The purpose of this Act is to ensure that telecommunications services are provided smoothly, and the interests of the users of the services are protected, through **making the operation for telecommunications services proper and reasonable** and promoting the fair competition in telecommunications business in consideration of the **public nature of telecommunications business**, thereby ensuring the sound development of telecommunications and the convenience of the lives of the people, and increasing the public welfare.
 - at that time, international communication **business** was strongly regulated
- academic experiment is **NOT BUSINESS**
 - started as such experiment by WIDE project

How Broadcast over the Internet Began in Japan?

- BS & cable TV contents was broadcast
 - with broadcast over telecommunication service act by BB cable (softbank group)
- rebroadcast of surface wave contents was not allowed by broadcast stations
 - permission necessary by copyright act and broadcast over telecommunication service act
 - **legal rebroadcast** by IP multicast started **without permission** since H15 12/23 at Sakae-mura, Nagano

電気通信役務利用放送法

- (再送信) 第十二条 電気通信役務利用放送事業者は、他の電気通信役務利用放送事業者又は放送事業者の同意を得なければ、その電気通信役務利用放送又は放送を受信し、これらを再送信してはならない。

Current Broadcasting Act

merged with broadcasting over telecommunication service act

- (再放送)
- (Re-transmission)
- 第十一条 放送事業者は、他の放送事業者の同意を得なければ、その放送を受信し、その再放送をしてはならない。
- Article 11 A broadcaster must not receive or re-transmit the programs of other broadcasters without first obtaining their consent.

Copyright Act

- Article 23 (1) The author of a work has the **exclusive right to transmit to the public** that work (this includes the right to make the work available for transmission, if the work is to be transmitted to the public via automatic public transmission).
- Article 99 (1) A broadcaster has the **exclusive right to rebroadcast or cablecast** its broadcast based on the receipt of its broadcast transmission.

(有線)放送の定義(1)

- 放送法 第二条
 - 「放送」とは、公衆によつて直接受信されることを目的とする無線通信の送信をいう。
- 電気通信役務利用放送法 第二条
 - この法律において「電気通信役務利用放送」とは、公衆によつて直接受信されることを目的とする電気通信の送信であつて、その全部又は一部を電気通信事業を営む者が提供する電気通信役務を利用して行うものをいう。

Current Broadcasting Act Article 2 (i) (official translation)

- the term "broadcasting" means the act of transmitting (including transmitting using the telecommunications equipment of other persons (meaning the telecommunications equipment provided for in Article 2, item (ii) of the Telecommunications Business Act ()); the same applies hereinafter)) through telecommunications (i) content intended to be received by the public;

Current Broadcasting Act Article 2 (i)

- the term "broadcasting" means the act of transmitting through telecommunications content intended to be received by the public;
- the term "broadcasting" means the act of transmission of telecommunication intended to be directly received by the public;
- 「放送」とは、公衆によって直接受信されることを目的とする電気通信（）の送信（）をいう。

著作権法

- (公衆送信権等) 第二十三条 著作者は、その著作物について、公衆送信(自動公衆送信の場合にあつては、送信可能化を含む。)を行う権利を専有する。
- (再放送権及び有線放送権)
- 第九十九条 放送事業者は、その放送を受信してこれを再放送し、又は有線放送する権利を専有する。

(有線)放送の定義(2)

- 著作権法 第二条
 - 七の二 公衆送信 公衆によつて直接受信されることを目的として無線通信又は有線電気通信の送信を行うことをいう。
 - 八 放送 公衆送信のうち、公衆によつて同一の内容の送信が同時に受信されることを目的として行う無線通信の送信をいう。
 - 5 この法律にいう「公衆」には、特定かつ多数の者を含むものとする。

Copyright Act Article 2

- (vii)-2 making a "**transmission to the public**" means making a transmission of **wireless** communications **or wired** telecommunications with the objective of allowing **the public to receive them directly** (excluding transmission (unless this constitutes the transmission of a work of computer programming) using telecommunications equipment one part of which is installed on the same premises as the other parts (or, excluding, if two or more persons occupy the same premises, transmission using telecommunications equipment both ends of which are installed within the area a single person occupies));

Copyright Act Article 2

- (viii) "broadcasting" means the transmission to the public of wireless communications with the objective of allowing the public to simultaneously receive transmissions with the same content;
- (ix)-2 "cablecasting" means the transmission to the public of wired telecommunications with the objective of allowing the public to simultaneously receive transmissions with the same content;

電気通信役務利用放送法

- (適用除外等) 第二十二條 この法律の規定は、次に掲げる電気通信役務利用放送については、適用しない。
 - － 三 その全部が電気通信事業法第九十条第一項第二号に規定する電気通信事業を営む者が提供する電気通信役務を利用して行われる電気通信役務利用放送その他その送信の技術及び役務の提供条件等からみて受信者の利益及び電気通信役務利用放送の健全な発達を阻害するおそれがないものとして総務省令で定める電気通信役務利用放送(前二号に該当するものを除く。)

Current Broadcasting Act

merged with broadcasting over telecommunication service act

- Article 176 (1) **The provisions of this Act does not apply to** relay broadcasting for measures against poor reception (meaning the relay broadcasting for measures against poor reception provided for in Article 5, paragraph (5) of the Radio Act; hereinafter the same applies in this Article), broadcasting using wire telecommunications equipment inside vehicles, vessels or aircraft and **other broadcasting provided for by Order of the Ministry of Internal Affairs and Communications as not likely to impede the interests of the recipients or the sound development of broadcasting when seen in the light of the extent of provision and conditions of provision, etc. of the services.**

電気通信役務利用放送法 施行規則

- 4 法第二十二条第一項第三号の総務省令で定める電気通信役務利用放送は、次のとおりとする。
 - 一 電気通信役務利用放送及びその受信の技術の発達のための試験研究の用に供される電気通信役務利用放送
 - 二 一月以内の期間を限って行われる電気通信役務利用放送
 - 三 放送番組を送信するために使用されるすべての電気通信設備（電気通信役務利用放送の業務を行おうとする者が設置するものを除く。）を電気通信事業を営む者が電気通信役務利用放送の業務を行おうとする者に専用させる場合を除き、電気通信役務利用放送の業務を行おうとする者の放送番組に係る信号の送信時に、当該信号を送出するための装置の出力端子における一の放送番組に係る信号の伝送速度が毎秒四メガビット以下である電気通信役務利用放送

Current Broadcasting Act

merged with broadcasting over telecommunication service act

- (適用除外)
- 第二百十四条 法第七十六条第一項に規定する放送は、次に掲げるものとする。
 - 一 電波法第四条の規定により開設に免許を要しない無線局を用いて行われる放送
 - 二 放送及びその受信の技術の発達のための試験研究の用に供される一般放送
 - 三 臨時かつ一時の目的(一箇月以内の目的をいう。)のために行われる一般放送
 - 四 一の構内(その構内が二以上の者の占有に属している場合においては、同一の者の占有に属する区域をいう。)において行われる有線一般放送
 - 五 信号のみを送信するために行われる有線一般放送
 - 六 一の有線放送施設に係る引込端子の数が五十以下の規模の施設により行われる有線一般放送(その全てが同時再放送又は共同聴取業務であるものその他これに類するものとして総務大臣が別に告示するものに限る。)
 - 七 公衆の通行し、又は集合する場所において公衆によつて直接視聴又は聴取されることを目的として行われる有線一般放送
 - 八 一般放送の業務を行おうとする者の放送番組に係る信号の送信時に、当該信号を送出するための装置の出力端子における一の放送番組に係る信号の伝送速度が毎秒二メガビット(デジタル放送の標準方式第四条に規定する情報源符号化方式を用いる場合にあつては毎秒四メガビット、デジタル放送の標準方式第六十二条第二項に規定する情報源符号化方式を用いる場合にあつては毎秒一・五メガビット)以下である有線一般放送(有線一般放送の品質に関する技術基準を定める省令(平成二十三年総務省令第九十五号)第二章第二節から第四節までに規定する放送方式による有線一般放送及びラジオ放送を除く。)
- 2 第百三十三条第二項及び第三項の規定は、前項第六号の引込端子について準用する。
- wired broadcast <=2Mbps is not restricted

著作権法

- (営利を目的としない上演等) 第三十八条 2
 - 放送される著作物は、**営利を目的とせず、かつ、聴衆又は観衆から料金を受けない場合には、有線放送**することができる。
- (著作隣接権の制限) 第一百二条
 - **、、、第三十八条第二項、、、の規定は、著作隣接権の目的となつている実演、レコード、放送又は有線放送の利用について準用し、、、**

著作権法

- (営利を目的としない上演等) 第三十八条 2

- 放送される著作物は、営利を目的とせず、かつ、聴衆又は観衆から料金を受けない場合には、有線放送し、又は専ら当該放送に係る放送対象地域において受信されることを目的として自動公衆送信(送信可能化のうち、公衆の用に供されている電気通信回線に接続している自動公衆送信装置に情報を入力することによるものを含む。)を行うことができる。
- (著作隣接権の制限) 第一百二条
- …、**第三十八条第二項**、…、**の規定は**、著作隣接権の目的となっている実演、レコード、放送又は**有線放送の利用について準用し**、…、

Copyright Act

- (2) It is permissible to cablecast a broadcast work or to transmit such a work via automatic public transmission **for non-commercial purposes and without charging a fee to the listening or viewing audience**, with the objective of allowing an exclusive audience within the service area that the broadcast is intended for to receive that broadcast.
- (Limitations on Neighboring Rights) Article 102 (1) The provisions of ... **Article 38, paragraphs (2) ... apply mutatis mutandis (meaning “similarly applicable”)** to the exploitation of a performance, phonogram, broadcast, or **cablecast that is the subject of neighboring rights;**

Is IP Multicast Broadcast and Cablecast in Copyright Act

- copyright act specifies so
- agency for cultural affair and JASRAC insist they are not broadcast/cablecast but are **automatic public transmission**
- sakae-mura was not sued by JASRAC

著作権法での (有線)放送の定義

- 著作権法 第二条
 - 七の二 公衆送信 公衆によつて直接受信されることを目的として無線通信又は有線電気通信の送信を行うことをいう。
 - 八 放送 公衆送信のうち、公衆によつて同一の内容の送信が同時に受信されることを目的として行う無線通信の送信をいう。
 - 5 この法律にいう「公衆」には、特定かつ多数の者を含むものとする。

著作権法上の 放送類似行為（公衆送信）

- （有線）放送
 - 公衆送信のうち、公衆によって同一の内容の送信が同時に受信されることを目的として行う無線（有線）通信の送信をいう。
- 自動公衆送信
 - 公衆送信のうち、公衆からの求めに応じ自動的に行うもの（放送又は有線放送に該当するものを除く。）をいう。

Copyright Act Article 2

- (vii)-2 making a "**transmission to the public**" means making a transmission of **wireless** communications **or wired** telecommunications with the objective of allowing **the public to receive them directly** (excluding transmission (unless this constitutes the transmission of a work of computer programming) using telecommunications equipment one part of which is installed on the same premises as the other parts (or, excluding, if two or more persons occupy the same premises, transmission using telecommunications equipment both ends of which are installed within the area a single person occupies));

Copyright Act Article 2

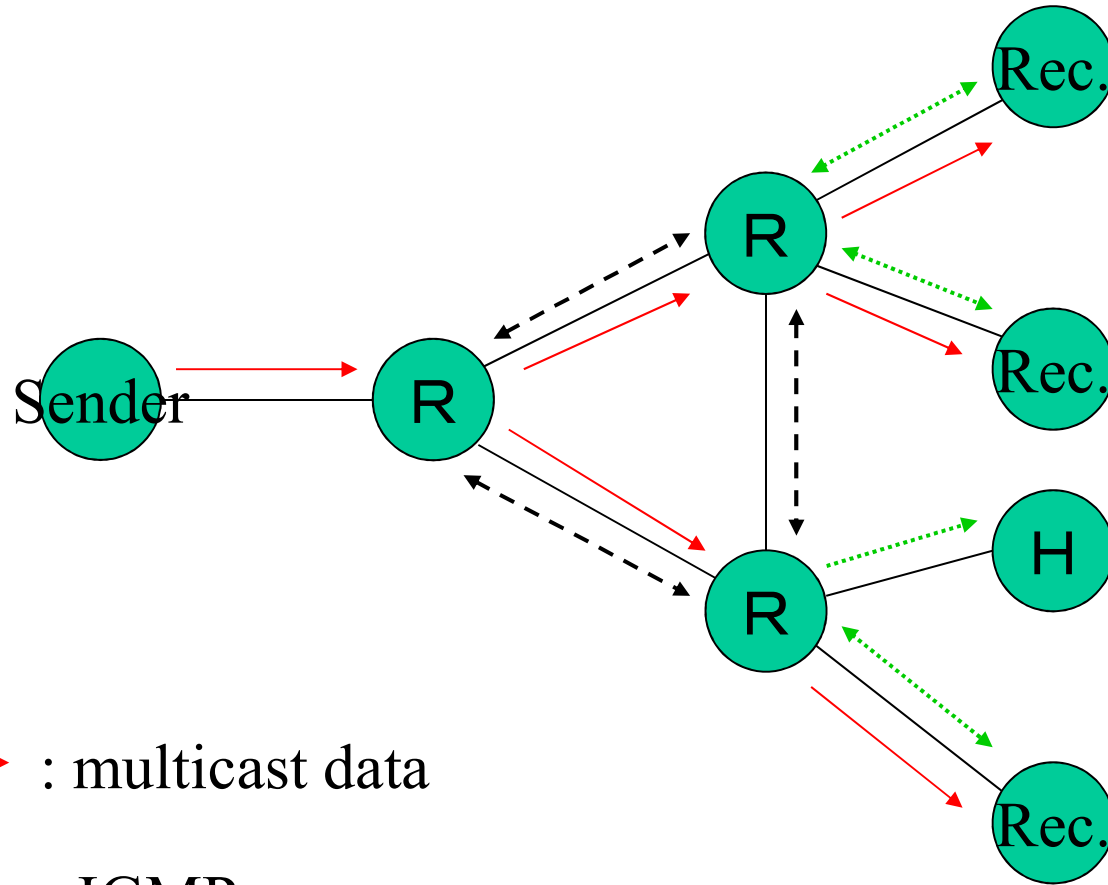
- (viii) "broadcasting" means the transmission to the public of wireless communications with the objective of allowing the public to simultaneously receive transmissions with the same content;
- (ix)-2 "cablecasting" means the transmission to the public of wired telecommunications with the objective of allowing the public to simultaneously receive transmissions with the same content;
- (ix)-4 "automatic public transmission" means a transmission to a member of the public (excluding one that constitutes a broadcast or cablecast) that is made automatically in response to a request from the member of the public;

Is IP Multicast Broadcast and Cablecast in Copyright A

- agency for cultural affair and JASRAC says
 - IP multicast is “made automatically in response to a request from the member of the public” and is not broadcast/cablecast even if “with the objective of allowing the public to simultaneously receive transmissions with the same content”
- what is written in copyright act
 - the transmission to the public “with the objective of allowing the public to simultaneously receive transmissions with the same content” is broadcast/cablecast even if “made automatically in response to a request from the member of the public”

IP multicast is **NOT** “made automatically in response to a request from the member of the public”

- request from receivers are received by a near-by router and propagated to other routers
 - by IGMP (Internet Group Management Protocol) and multicast routing protocols
- however, sender do not receive request
 - sender sends packets even if there is no receiver

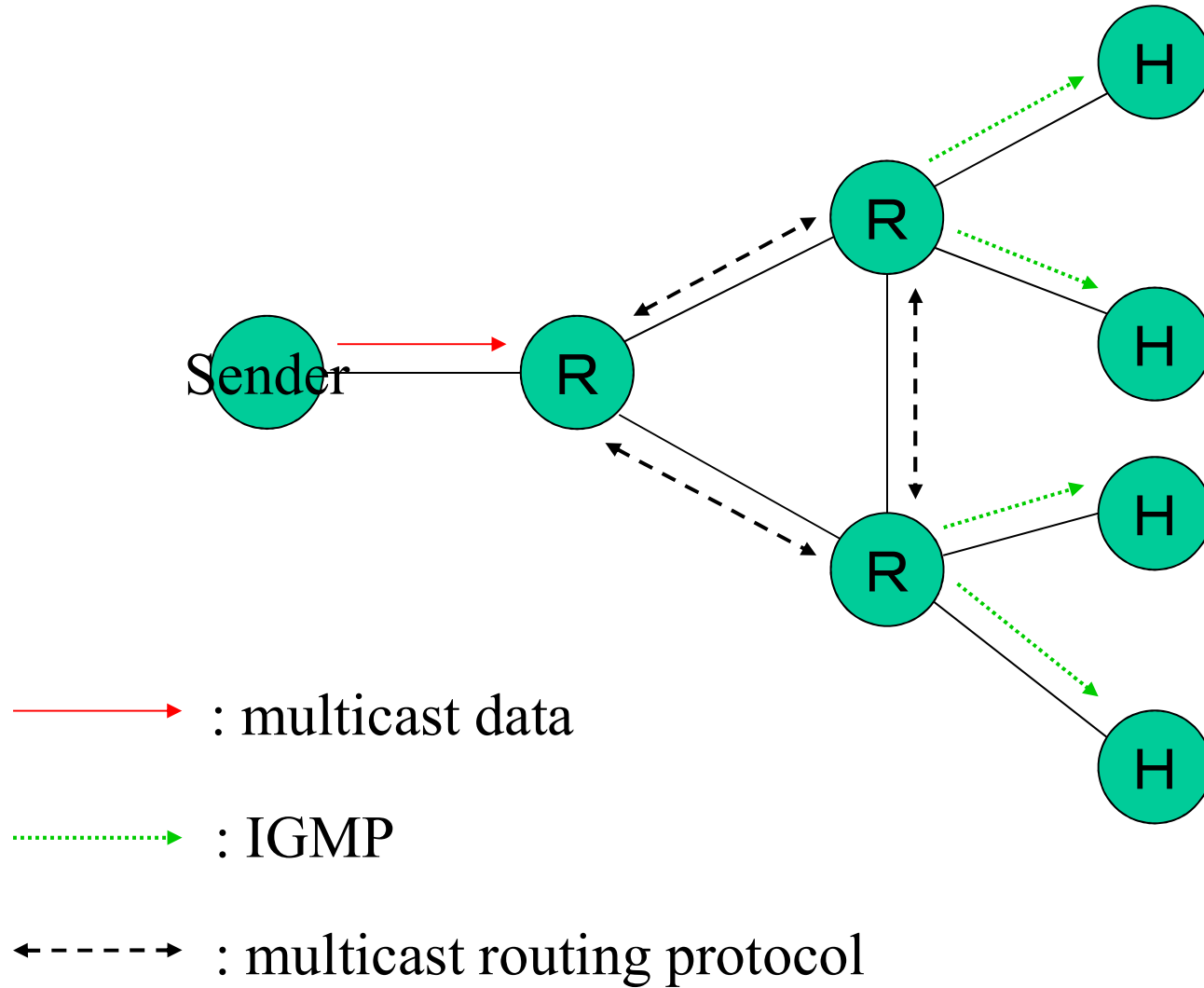


→ : multicast data

→ : IGMP

↔ : multicast routing protocol

packet flow with multicast



packet flow with multicast
(with no receiver)

Examples of Broadcast/Cablecast of Copyright Act

- broadcasting over radio wave
- broadcasting over cable
- broadcasting by IP multicast
- broadcasting (?) by IP **unicast**, “with the objective of allowing the public to simultaneously receive transmissions with the same content”
 - simultaneous transmission of multiple TCP streams with same contents!

Examples of Automatic Public Transmission

- ISDN Karaoke
- VOD (with IP unicast)
 - not “simultaneous”
 - “made automatically in response to a request from the member of the public”

Extension of Protection Period of Movies (“Roman Holiday” Case)

- from 50 years to 70 years
- enforced on H.16 1/1
 - 20 years of extension if right is valid at the beginning of year
- movies with right expiring on year end of H.15?
 - agency for cultural affairs (bunkacho) says:
 - extended because end of H.15=beginning of H.16
 - Hollywood fought upto supreme court and lost
 - agency for cultural affairs are working not for Japanese but for Hollywood

明治五年太政官布告

第三百三十七号(改暦ノ布告)

- 今般改暦ノ儀別紙 詔書ノ通被 仰出候条此旨相達候事

— (別紙)

詔書写

朕惟フニ我邦通行ノ暦タル太陰ノ朔望ヲ以テ月ヲ立テ太陽ノ躔度ニ合ス故ニ二三年間必ス閏月ヲ置カサルヲ得ス置閏ノ前後時ニ季候ノ早晚アリ終ニ推歩ノ差ヲ生スルニ至ル殊ニ中下段ニ掲ル所ノ如キハ率子妄誕無稽ニ属シ人知ノ開達ヲ妨ルモノ少シトセス蓋シ太陽暦ハ太陽ノ躔度ニ從テ月ヲ立ツ日子多少ノ異アリト雖モ季候早晚ノ變ナク四歳毎ニ一日ノ閏ヲ置キ七千年ノ後僅ニ一日ノ差ヲ生スルニ過キス之ヲ太陰暦ニ比スレハ最モ精密ニシテ其便不 便モ固リ論ヲ俟タサルナリ依テ自今旧暦ヲ廢シ太陽暦ヲ用ヒ天下永世之ヲ遵行セシメン百官有司其レ斯旨ヲ体セヨ

明治五年壬申十一月九日

改曆ノ布告の時刻表

午前	零時	即午後十二時	子刻	一時	子半刻	二時	丑刻	三時	丑半刻
	四時	寅刻		五時	寅半刻	六時	卯刻	七時	卯半刻
	八時	辰刻		九時	辰半刻	十時	巳刻	十一時	巳半刻
	十二時	午刻							
午後	一時	午半刻		二時	未刻	三時	未半刻	四時	申刻
	五時	申半刻		六時	酉刻	七時	酉半刻	八時	戌刻
	九時	戌半刻		十時	亥刻	十一時	亥半刻	十二時	子刻

Proclamation by Grand Council of State in Meiji 5 to Use Julian Calendar

- time table shows end of a day is beginning of the next day
 - bukacho is correct if a day were $[0:0:0, 24:0:0]$
- natural structure of time $R=[0, 1) \times \mathbb{Z}$
 - 24:0:0 is not today but the next day
 - jurists not understanding real number theory might think $R=[0, 1] \times \mathbb{Z}$
 - still, most of them, excluding those in bunkacho including those in supreme court, **know** $(1, n) < (0, n+1)$

Amendment of Copyright Act in H.17

- severer punishment (maximum imprisonment 5 years -> 10 years)
- legalize (?) IP multicast
- parliament discussion confirmed parliament is acting against copyright act (by Hosaka)
 - copyright act article 40 (2) is not applicable to internet live telecast of parliament discussion and its video library
 - even after the amendment at that time

Severer Punishment?

- maximum imprisonment by US code for copyright act is 10 years
- maximum imprisonment by JP copyright act is 5 years?
 - an article in JP penal code makes it 10 years

US Code for Copyright Infringement

- § 1204 · Criminal offenses and penalties⁵
- (a) In General.—Any person who violates section 1201 or 1202 willfully and for purposes of commercial advantage or private financial gain—
 - (1) shall be fined not more than \$500,000 or **imprisoned for** not more than **5 years**, or both, for the first offense; and
 - (2) shall be fined not more than \$1,000,000 or **imprisoned for** not more than **10 years**, or both, **for any subsequent offense.**

JP Copyright Act

- 第百十九条 著作権、出版権又は著作隣接権を侵害した者()を侵害する行為とみなされる行為を行つた者、第百十三条第六項の規定により著作権若しくは著作隣接権を侵害する行為とみなされる行為を行つた者又は次項第三号若しくは第四号に掲げる者を除く。)は、**十年以下の懲役**若しくは千万円以下の罰金に処し、又はこれを併科する。
- Article 119 (1) A person that infringes a copyright, print rights, or neighboring rights () is subject to **imprisonment for a term of up to ten years**, a fine of up to ten million yen, or both.

JP Penal Code

- (再犯加重)
- (Aggravated Punishments for a Second Conviction)
- 第五十七条 再犯の刑は、その罪について定めた懲役の長期の二倍以下とする。
- Article 57 The maximum term of punishment for a **second conviction shall be twice the maximum term of imprisonment** prescribed in relation to such crime.

著作権法

- （政治上の演説等の利用）第四十条 2 国若しくは地方公共団体の機関、独立行政法人又は地方独立行政法人において行われた公開の演説又は陳述は、前項の規定によるものを除き、報道の目的上正当と認められる場合には、新聞紙若しくは雑誌に掲載し、又は放送し、若しくは有線放送することができる。

Copyright Act Article 40 (2)

- If it is found to be justified for the purpose of news reporting, it is permissible for a person to print a speech or statement that has been delivered in public by a national or local government agency, incorporated administrative agency, or local incorporated administrative agency, other than one under the provisions of the preceding paragraph, in a newspaper or magazine; or to broadcast or cablecast such a speech or statement

著作権法（改正後）

- （政治上の演説等の利用）第四十条 2 国若しくは地方公共団体の機関、独立行政法人又は地方独立行政法人において行われた公開の演説又は陳述は、前項の規定によるものを除き、報道の目的上正当と認められる場合には、新聞紙若しくは雑誌に掲載し、又は放送し、若しくは有線放送し、若しくは当該放送を受信して同時に専ら当該放送に係る放送対象地域において受信されることを目的として自動公衆送信（送信可能化のうち、公衆の用に供されている電気通信回線に接続している自動公衆送信装置に情報を入力することによるものを含む。）を行うことができる。

Copyright Act Article 40 (2) after Amendment

- (2) If it is found to be justified for the purpose of news reporting, it is permissible for a person to print a speech or statement that has been delivered in public by a national or local government agency, incorporated administrative agency, or local incorporated administrative agency, other than one under the provisions of the preceding paragraph, in a newspaper or magazine; **or to broadcast or cablecast such a speech or statement, or to receive the broadcast transmission of such a speech or statement and simultaneously transmit it via automatic public transmission (this includes the automatic public transmission of a broadcast that is made available for transmission by the data for it being input to an automatic public transmission server that is connected with a public telecommunications network) with the objective of allowing an exclusive audience within the service area that the broadcast is intended for to receive it.**

Right Limitations and Rights

- right limitation of article 40 (2) is obviously based on suffrage (参政权)
 - though right limitation of copyright act does not, by itself, provide right
 - it does not delay limitations are based on right
 - limited enumeration interpretation is wrong
 - provision of article 40 (2) based on suffrage should be extended to cover automatic public transmission
- fair use should be available already in japan
 - “creation and enjoyment of culture and art are people’s birthright” (basic act on culture and art)

衆議院事務局の見解 (フェアユースそのもの)

- 衆議院ではインターネット中継を行う行為を「自動公衆送信」と考えており、**著作権法第40条第2項には「自動公衆送信」の行為は挙げられていませんが、**インターネットでの中継放送は画像・音声を公衆に伝達する点で、**その実態は実質的に同項の「放送」または「有線放送」と同視できるので、**インターネット中継を行う行為は発言者に対して著作権の侵害にならないと判断しています。

Opinion of Lower House Secretariat (Fair Use)

- lower house recognizes internet live telecast is “automatic public transmission”, which is not enumerated in article 40 (2) of copyright act. but it is not violation of copyright, because internet live telecast is to transmit video and voice to the public, which is effectively identical to “broadcast” and “cablecast” allowed by 40 (2)

Illegalization of Download

- private recording from illegal copy or site is
 - excluded from private use of article 30
 - to protect users
 - illegal only if user knows origin is illegal
 - so called “knowingly”
 - no punishment
 - only civil liability
 - revised to be criminal in 2012

30条の例外の追加

- 三 著作権を侵害する自動公衆送信（国外で行われる自動公衆送信であつて、国内で行われたとしたならば著作権の侵害となるべきものを含む。）を受信して行うデジタル方式の録音又は録画を、その事実を知らずに行う場合

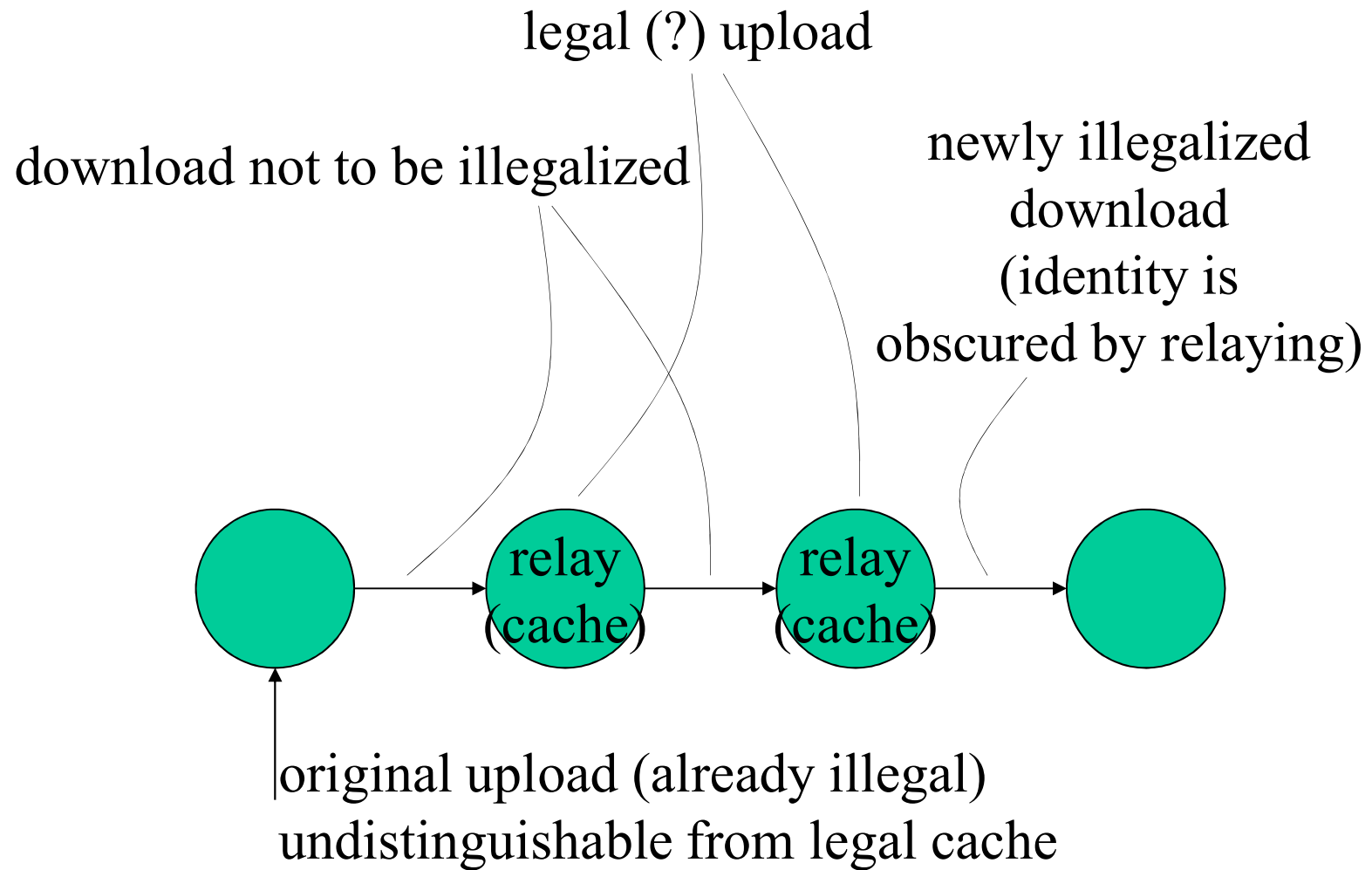
Copyright Act Article 30

(Cont'd)

- (i) a user reproduces a work by means of an automated duplicator that has been set up for use by the public;
- (ii) the reproduction of the work has become possible due to the circumvention of technological protection measures or a barrier to reproduction of the work no longer arises as a result of that circumvention, and the user reproduces the work in the knowledge of this fact;
- (iii) the work is received via an automatic public transmission that infringes a copyright, and the user records the sounds or visuals of the work in digital format, in the knowledge of this fact.

Illegalization of Download is Meaningless

- private copying from illegal copy or site knowingly is “tort”
 - civil liability already exists
- can not make “winny” (P2P file sharing software popular at that time) illegal
 - cache created when relaying someone else’s request is **not** knowingly copying
- first of all, why download is legal?
 - because it’s private? how about for business?



anonymity by chain of upload/download of winny relaying

Civil Code

- (不法行為による損害賠償)
- (Damages in Torts)
- 第七百九条 故意又は過失によって他人の権利又は法律上保護される利益を侵害した者は、これによって生じた損害を賠償する責任を負う。
- Article 709 A person who has **intentionally** or negligently **infringed** any right of others, or **legally protected interest of others**, shall be liable to compensate any damages resulting in consequence.

補償金制度

- 私的使用を目的として、デジタル方式の録音又は録画の機能を有する機器であつて政令で定めるものにより、当該機器によるデジタル方式の録音又は録画の用に供される記録媒体であつて政令で定めるものに録音又は録画を行う者は、相当な額の補償金を著作権者に支払わなければならない。

Copyright Act Article 30 (2)

compensation for private use

- (2) A person who, for private use, records the sound or visuals of a work in a digital format, on a digital sound or visual recording medium that is provided for by Cabinet Order, by means of a machine with digital sound or visual recording functions which is provided for by Cabinet Order must pay a reasonable amount of compensation to the copyright owner.

現行制度の下では対象には ならない機器

- ア 録音録画機能が附属機能でない機器のうち記録媒体を内蔵した一体型のもの（例 HDD録画機器、携帯用オーディオ・レコーダー）
- イ 録音録画機能を含めて複数の機能がある機器でどの機能が主要な機能といえないもの（例 現在のパソコン）
- ウ 録音録画機能を附属機能として組み込んだ機器（例 留守番電話、携帯電話、録音機能付カーナビゲーション）
- 立法時に整理した対象機器についての考え方に照らすと対象に加えても特段の問題はないと考えられる機器もある一方、新たな考え方を構築しなければ対象機器になし得ないものもある

Equipment not Covered by Current Cabinet Order

- recorder without removable media (e.g. HDD video recorder)
- multipurpose equipment to be usable for recording purpose (e.g. PC)
- equipment having recoding capability as supplemental function (e.g. recording phone, mobile phone, car navigator with recording capability)

補償金を徴収する理由

- ア 私的録音録画のために権利者の許諾を得る必要があるとすればそこで支払われたであろう使用料相当分が経済的不利益であるとする考え方（補償措置は権利制限の代償）
- イ 権利制限することによって、権利者の許諾を得て行われる事業（販売、配信、放送等）に与えた経済的損失が経済的不利益であるとする考え方（補償措置は新たな権利の付与と同様）

Reason to Collect Compensation

- compensation is price for right limitation
- compensation is new right for copyright holders

補償金拡大が狙う範囲

- HDD内蔵型録画機器、携帯用オーディオ・レコーダー
 - 対象にすべきであるとする意見が大勢
 - 録音録画機能以外に静止画・文書等の記録やゲームのサポート機能等の機能を有しているもの
 - 対象機器に加えて差し支えないと考えられるとの意見
- パソコン、携帯電話、録音機能付カーナビ
 - 意見の一致に至っていない
- 録画機能を組み込んだテレビ
 - 対象に加えるべきであるという意見

New Targets of Compensation

- HDD video recorder, handy audio recorder
 - should be a target
 - even with additional functions such as game
- PC, mobile phone, car navigator
 - no consensus yet
- TV with recording capability
 - should also be a target

対象機器・記録媒体の決定方法

現行制度の問題点？？？

- 文化審議会著作権分科会報告書(平成18年1月)では、現行の政令指定方式については、
 - － ア 技術を指定する現行制度は、指定までの時間がかかりすぎて権利者の補償に欠けること
 - － イ 技術を指定する現行制度は、補償金を支払う消費者には理解できず、制度への理解を妨げる一因ともなっている
- 仮に**専用機器だけでなく、それ以外の機能を有する機器等にも拡大する**場合は、現行の政令指定方式で問題が生じないのかについて十分検証する必要

補償金制度改革案

- 法令で定める基準に照らして、公的な「評価機関」の審議を経て、文化庁長官が定める。
 - 公的な「評価機関」って、、、
 - 私的録音録画小委員会？
 - 公的な評価機関は、権利者、製造業者、消費者、学識経験者で構成され、そこで対象範囲が議論され、透明性が確保された決定プロセスにより審議される
 - 円滑な対象機器等の決定のため、評価機関は学識経験者で構成され、利害関係者からは必要に応じ意見を聞くことにとどめるべきであるとの意見
 - 政令じゃなくす必要性？法令って、文部科学省令？
 - 経済産業省や総務省が反対できない？

How Targets Should be Specified?

- current specification by cabinet order
 - needs too much time
 - not understandable by consumers???
- if new targets should be specified by ministerial order (METI can not argue against)

最悪(つまり普通に考えられる) の場合の補償金対象機器

- HDD内蔵型録画機器、携帯用オーディオ・レコーダー、ポータブルゲーム機、パソコン、携帯電話、録音機能付カーナビ、録画機能を組み込んだテレビ、インターネット接続機器
- さすがに経済産業省(と総務省?)が動き
 - 補償金制度の拡大は潰れた

Worst Possible (thus, Likely to Occur) Targets

- HDD recorder, handy audio recorder, portable gaming machine, PC, mobile phone, car navigator, TV with recoding capability, modems to connect to the internet
- METI (and SOUMU sho?) acted against
 - law amendment failed, thanks to IT revolution
 - when TV was king of home appliance, home appliance vendors can't act against broadcast stations
 - most advance technology was used for professional TV equipment
 - today, most advanced technology is used for mobile phone

著作権法第一条

- この法律は、著作物並びに実演、レコード、放送及び有線放送に関し**著作権者の権利及びこれに隣接する権利を定め**、これらの文化的所産の公正な利用に留意しつつ、**著作権等の権利の保護を図り、もつて文化の発展に寄与することを目的とする。**
 - － 目的は「文化の発展」のはず

Copyright Act

- Article 1 The purpose of this Act is to provide for authors' rights and neighboring rights with respect to works, as well as with respect to performances, phonograms, broadcasts, and cablecasts, and to ensure protection for the rights of authors and other such persons while according attention to the fair exploitation of these cultural products, and thereby to contribute to cultural development.
 - too strong copyright is obstacle to cultural development

Unification Attempt of ICT Acts by Ministry of Internal Affairs and Communications

- unify broadcast act and acts for broadcast-like service
 - wired broadcast and broadcast by telecommunication service (such as CS)
- unify telecommunication?
 - regulate web contents like broadcast contents!
 - failed (ISP and METI acted against)
 - no reason to regulate

Definition of Broadcasting Changed

- old
 - (i) the term "broadcasting" means the act of **radio** transmission intended to be directly received by the public;
 - 「放送」とは、公衆によって直接受信されることを目的とする無線通信の送信をいう。
- new
 - the term "broadcasting" means the act of transmission of **telecommunication** intended to be directly received by the public;
 - 「放送」とは、公衆によって直接受信されることを目的とする電気通信（送信をいう。

Unchanged Part

- (受信契約及び受信料)
- (Reception Contracts and Fees for Receiving Broadcasts)
- 第六十四条 協会の放送を受信することのできる受信設備を設置した者は、協会とその放送の受信についての契約をしなければならない。ただし、放送の受信を目的としない受信設備又はラジオ放送(音声その他の音響を送る放送であつて、テレビジョン放送及び多重放送に該当しないものをいう。第百二十六条第一項において同じ。)若しくは多重放送に限り受信することのできる受信設備のみを設置した者については、この限りでない。
- Article 64 (1) Persons installing reception equipment capable of **receiving NHK broadcasts conclude a contract with NHK** for the reception of those broadcasts; provided, however, that this does not apply to those persons who have installed reception equipment not intended for the reception of broadcasts or reception equipment only capable of receiving radio broadcasts (meaning broadcasts comprising of voices and other sounds that do not come under television broadcasting or multiple broadcasting; the same applies in Article 126, paragraph (1)) or multiple broadcasting.

Wrap Up

- IT revolution cause constitutional changes
- public telecommunication act disappeared
 - phone business will disappear
- broadcast and publishing business?
 - may disappear even before legal changes?
 - parliament is already support fair use
- progress without insisting on vested right!
 - to be careful not to expand vested right by confusions of revolution

Legal Hacking is Fun