New Directions for Telecom Competition Policy

in the transition period from PSTN to IP-based networks

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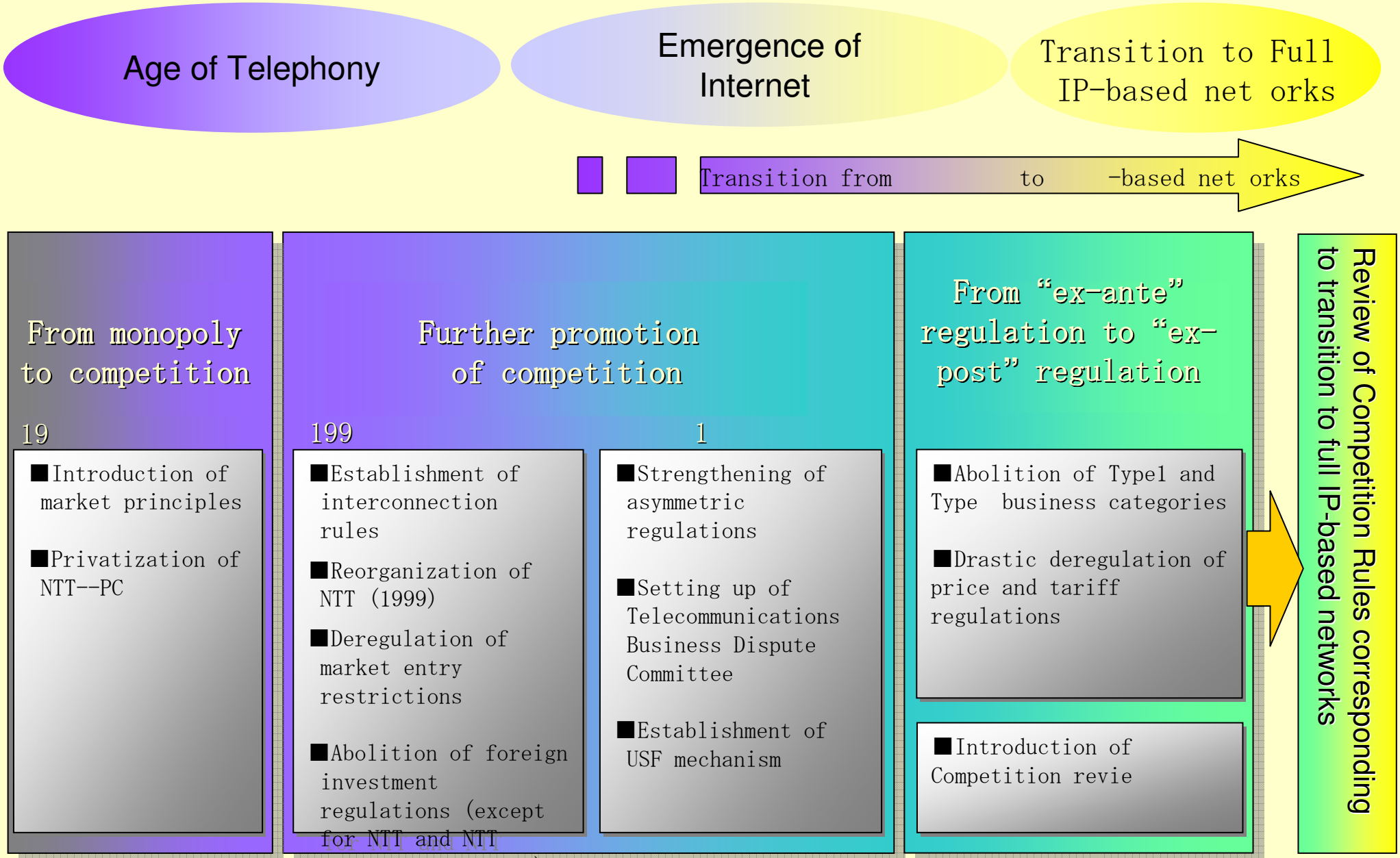
Outline of Japanese Telecom Competition Policy

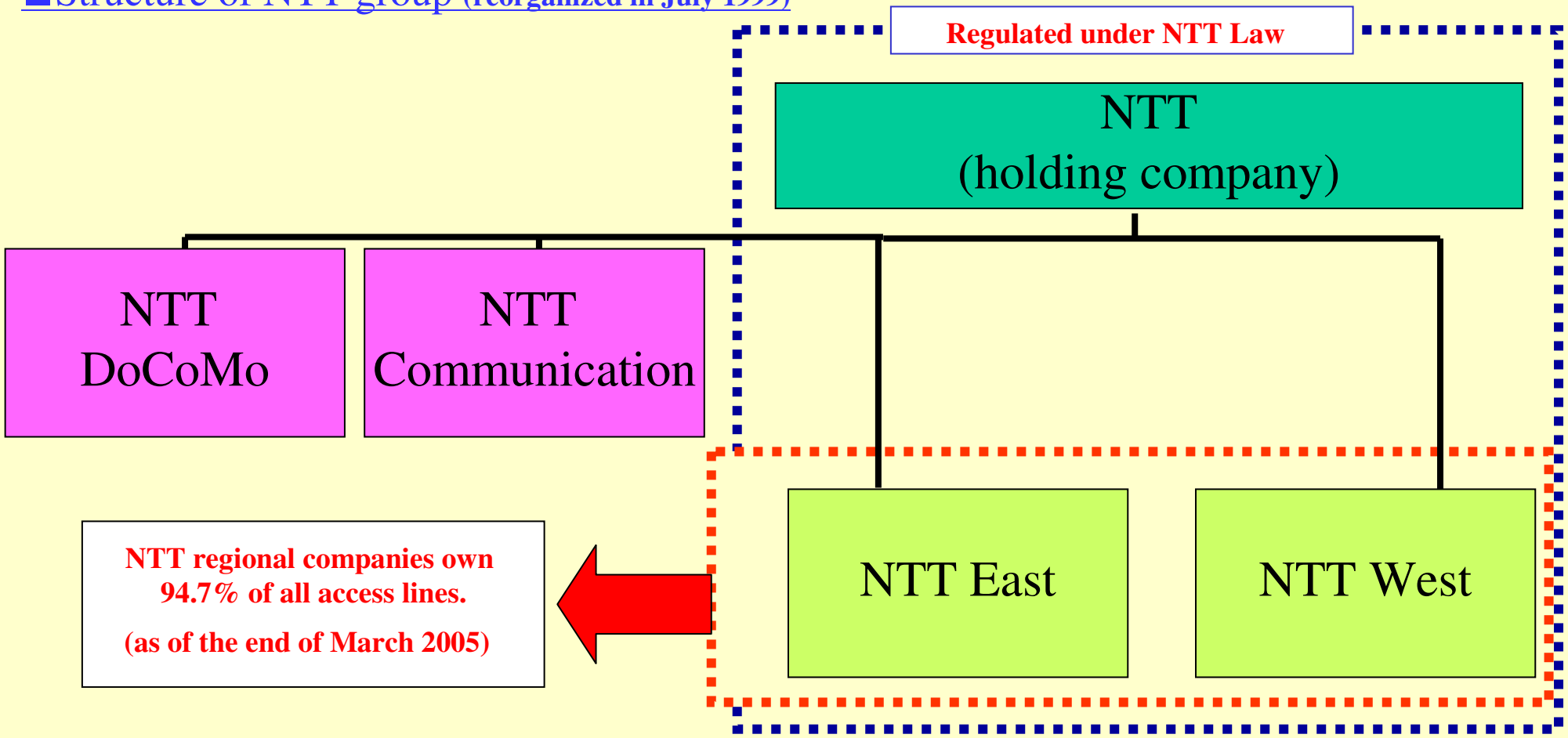


Current Status of Japanese Telecom Market

■Number of telecom carriers (NCC: New Common Carriers)

April 1985	April 1989	April 1993	April 1997	April 2001	March 2006
87	738	1,259	4,726	9,348	13,729

■Structure of NTT group **(reorganized in July 1999)**



Outline of the SMP Regulation (1) --- Interconnection(1/2)

- Focusing on SMP carrier facilities (designating such facilities) and regulating the provision conditions.
- In the fixed market, essential facilities are regulated.
- In the mobile market, the facilities serving a relatively larger proportion of subscribers are regulated though they are not essential because the providers are limited due to the scarcity of the frequency.

Outline of the SMP Regulation (1) --- Interconnection(2/2)

Market	fixed	mobile
□riteria	□ccess lines □ith more than □□□ of share (designated on a prefectural basis)	□ccess lines □ith more than □□□ of share (designated on a business area basis)
□egulated facilities	□ccess lines and related telecommunications facilities	□ase station lines and related mobile telecommunications facilities
□bligations	□□ccounting separation □□uthori□ation of provided conditions □□ost□oriented charges	□□otification of provided conditions

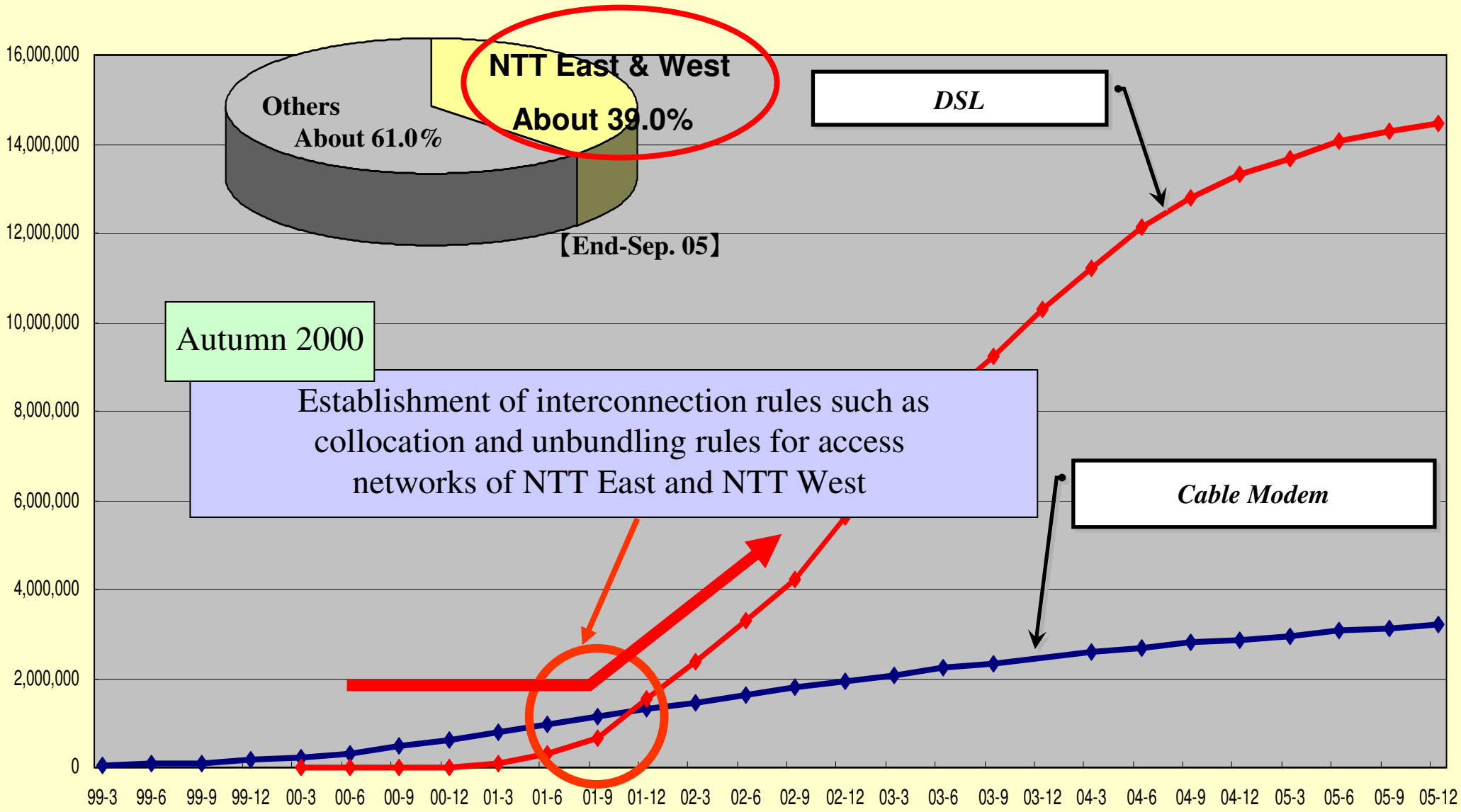
Outline of the SMP Regulation (2) --- Prohibition

Market	fixed	mobile
□riteria	□he carriers □ith designated facilities	□he carriers □ith designated facilities □ □xceeding □□□ of market share (revenue basis)
prohibition	□ □sing or providing other telecom operator□s information inappropriately. □ □reating other telecom operators unfairly. □ Interfering or restricting manufacturers, etc. un□ustly. □ Fire□all □ith specified brother□child telecom operators. □ □reating such specified operators more favorable than others.	□ □sing or providing other telecom operator□s information inappropriately. □ □reating other telecom operators unfairly. □ Interfering or restricting manufacturers, etc. un□ustly.

Outline of the SMP Regulation (3) --- Retail Tariff

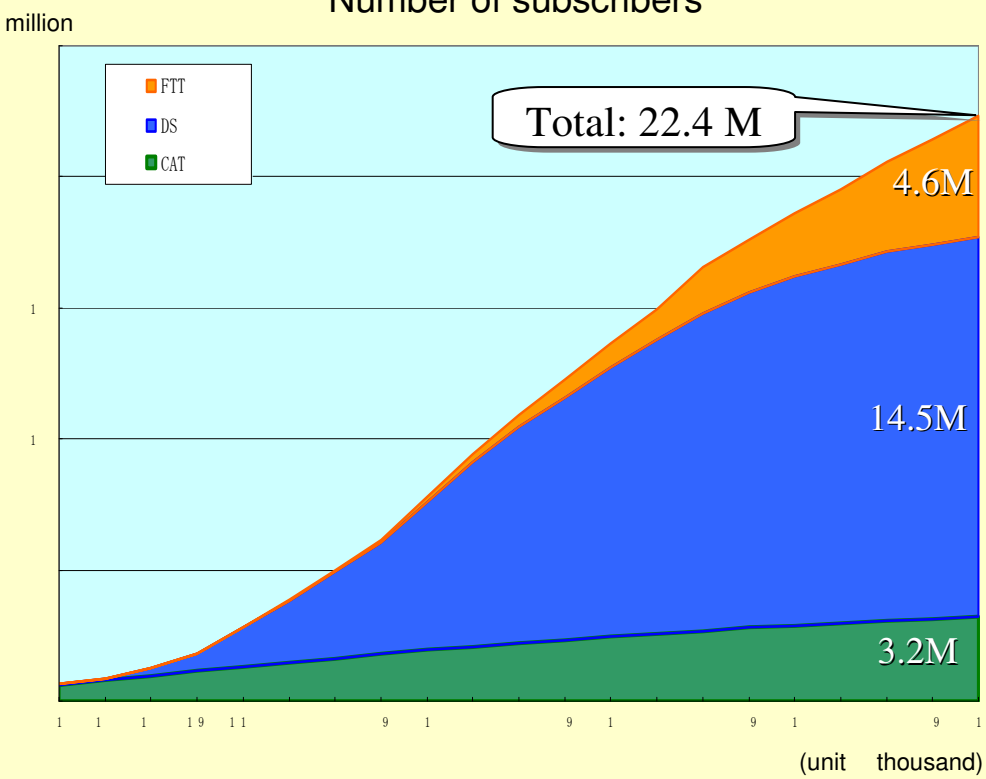
Market	fixed	mobile
Criteria	SMP carrier's services provided with designated essential facilities	No regulation
Less competitive	FOMA, telephone, ISDN, public phone, leased line etc. Notification of the minimum service level	
Less competitive & Major influence on user's benefit	telephone, ISDN, public phone, leased line etc. Price cap regulation	
Others	No regulation	

Development of DSL Service Market



Number of Broadband Service Subscribers in Japan

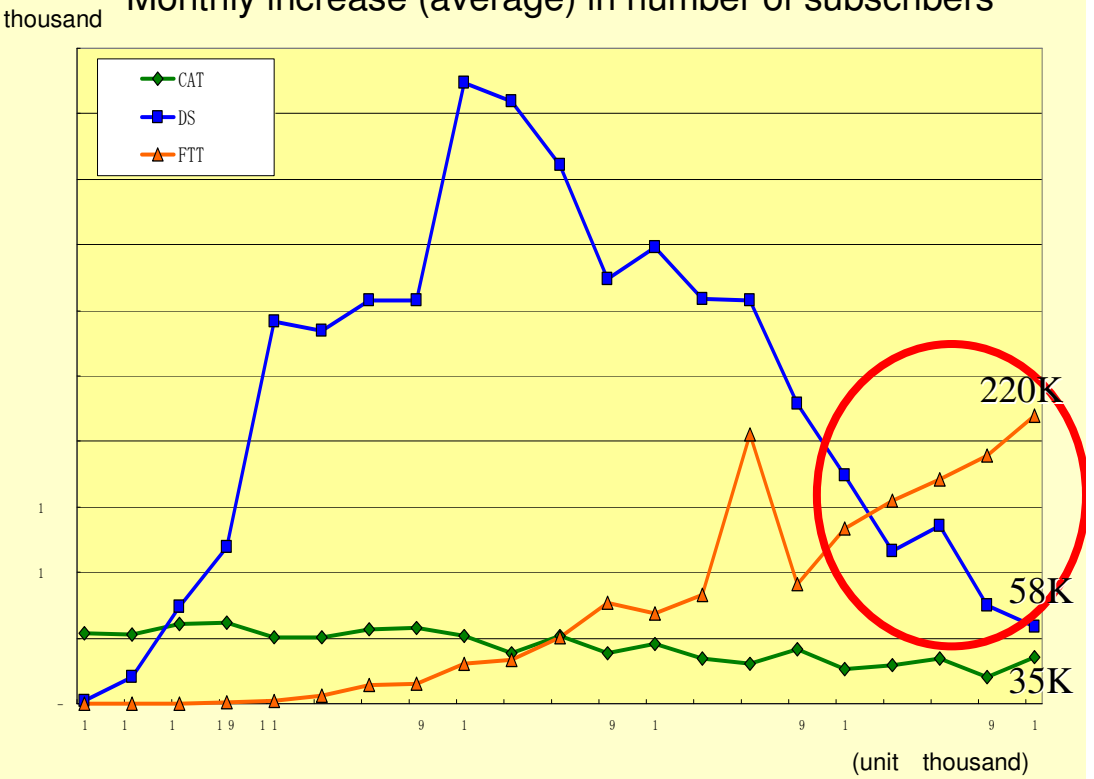
Number of subscribers



(unit thousand)

	01/03	02/03	03/03	04/03	05/03	05/12
FTTH	0.2	26	30	1,140	2,850	4,637
0DSL	70	2,370	7,020	11,190	13,670	14,480
CATV	780	1,450	2,060	2,570	2,950	3,227

Monthly increase (average) in number of subscribers



(unit thousand)

	00/4Q	01/4Q	02/4Q	03/4Q	04/4Q	05/3Q
FTTH	0.067	5.7	33	83	140	220
DSL	20	74	459	308	117	58
CATV	54	51	38	34	29	35

Note: The number of VoIP subscribers is approximately 10.6 million (as of the end of December 2005).

Fiber Optic Infrastructure in Japan

As of the end of March 2006

Area		Coverage											
		FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05 (estimate)
Metropolitan Areas	Total	16%	21%	28%	34%	44%	56%	61%	77%	89%	94%	95%	96%
	Business Areas	32%	47%	74%	89%	92%	93%	94%	95%	97%	97%	98%	9
Cities with populations of more than 100 thousand	Total	8%	11%	11%	13%	22%	31%	40%	54%	73%	86%	88%	92%
	Business Areas	6%	23%	48%	59%	69%	72%	72%	77%	85%	87%	87%	93%
Others		2%	3%	5%	6%	8%	14%	22%	38%	49%	59%	65%	
Nationwide		10%	13%	16%	19%	27%	36%	43%	59%	72%	80%	84%	

Note: "Business Area" means an area in which more than 50% of subscribers are business customers.

Methods of Calculating Access Charges

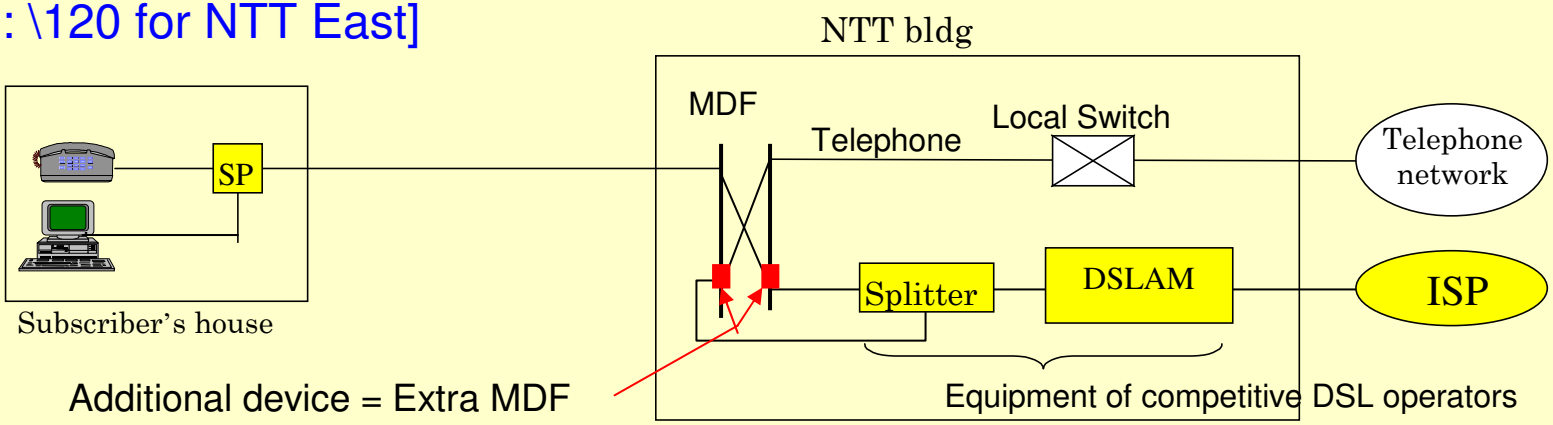
Methods		Main objects
Long-Run Incremental Cost method (LRIC)		・Local switch ・Tandem switch ・Interoffice line between Local switch and Tandem switch ・Signal transmission network ・Access line to PHS base station
Actual cost method	Forward-looking cost method	・Subscriber line (Fiber) ・Regional IP network
	Historical cost method	・Subscriber line (copper) ・Interoffice fiber ・Exclusive line ・Public phone
Carrier's rate		・ISDN subscriber line (INS1500) ・Exclusive line

Access Charges to Promote Broadband

➢ ADSL

The access charge we approved for line sharing is only for additional devices and line managing costs as the cost of the local loop is already paid by users as a basic telephone charge.

[AC: \120 for NTT East]



➢ FTTH

We do not adopt LRIC for optical fibre local loops as NTT is still building fibre loops and it is inappropriate to adopt a method that would result in NTT losing its investment incentives.

We have adopted the method we call 'forward-looking cost method.'

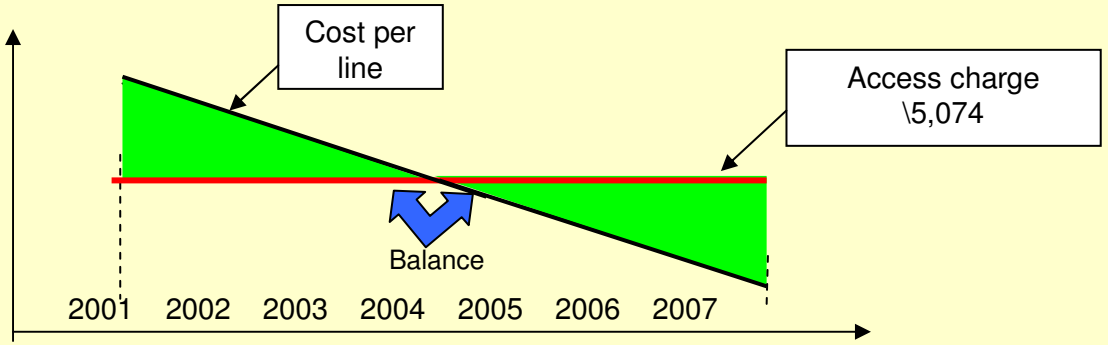
Forward-looking Cost Method

- This method uses average charges calculated taking into account the predicted cost and demand within the next several years.
- The cost price and the access charge should balance out during the said period.
- This method is especially desirable for new IP networks as it allows NTT to recover full investment in fibre. At the same time, we can suppress the level of charges though the cost per line is very high due to limited demand initially.

Fiber local loop access charge

 Access charges were approved in August 2001 for 7 years from 2001 to 2007.

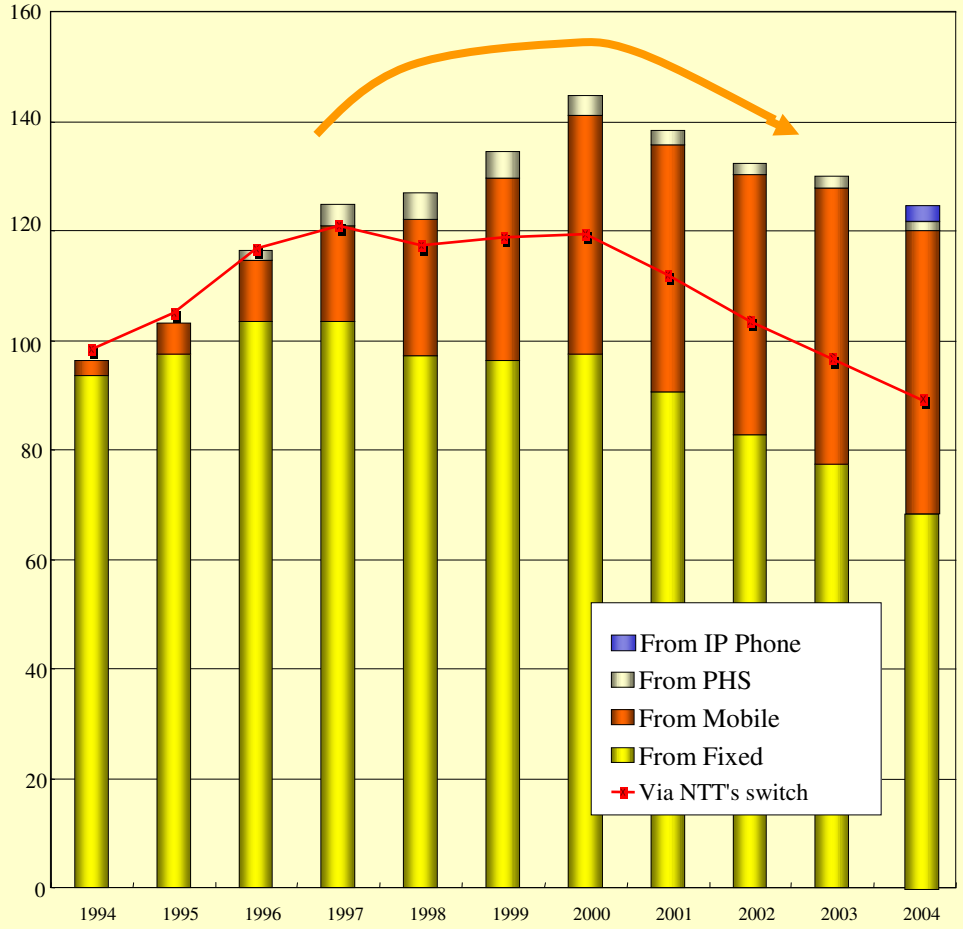
[AC: \5,074 /month]



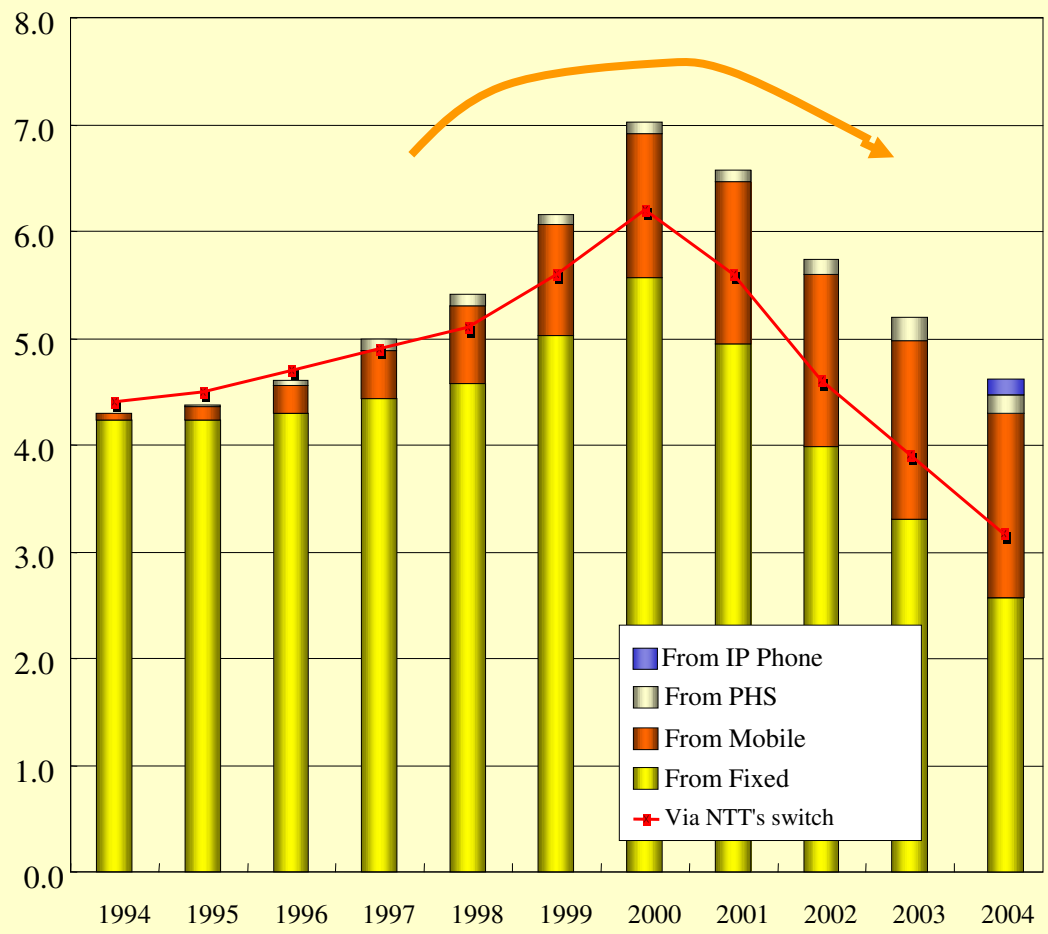
Need to Review Access charge for PSTN

- Fixed-line traffic volume has been declining by around 15% a year after peaking in FY2000.
- Access charge will inevitably increase if the traffic continuous to decrease.

(bn times)



(bn hours)



Access Charges for PSTN in FY2005-2007

- Interconnection charge may exceed phone charge if the volume continuous to decline.
- Restrict interconnection charge after FY2005 by reviewing method for calculating cost.

1 Reviewing LRIC model

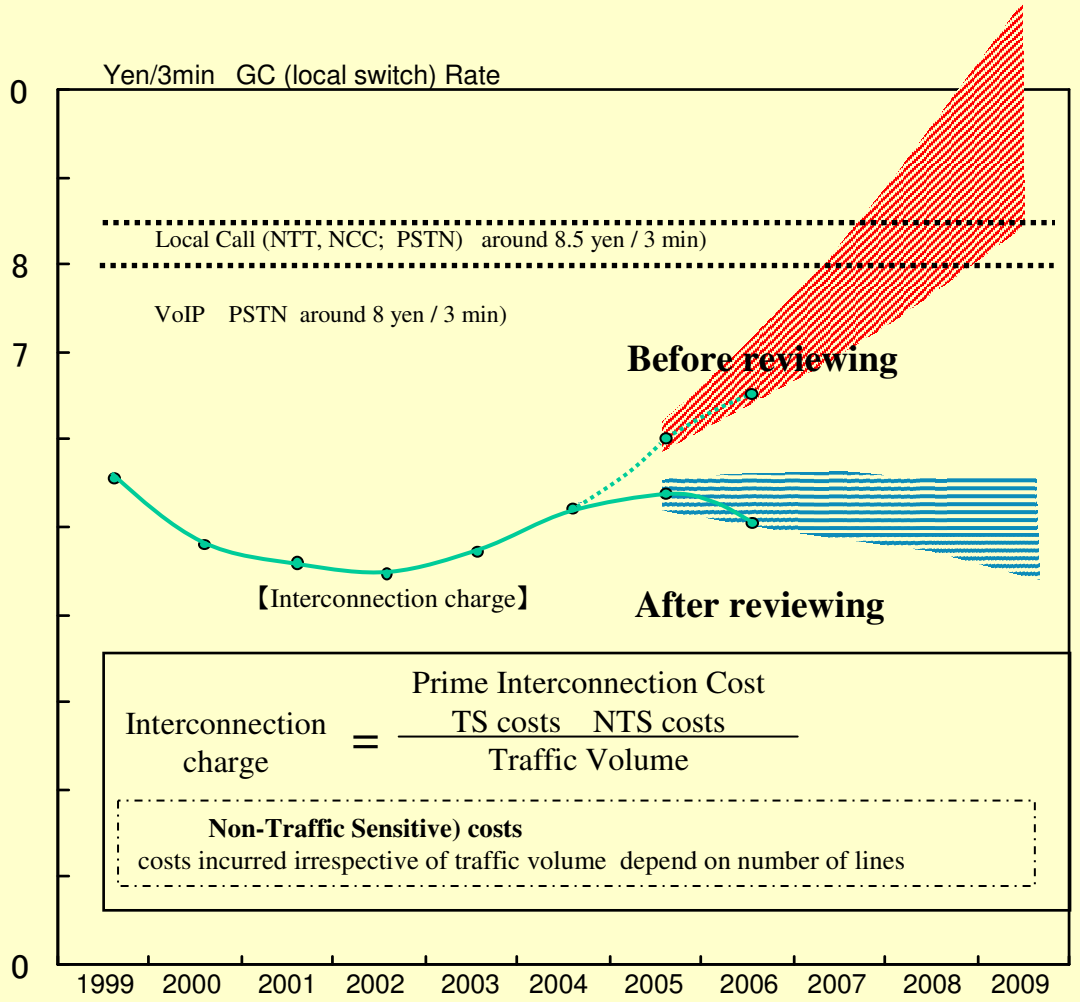
Reviewing input such as durable years for new LRIC model applied to FY05-07 (3 years)

→ more than 10% reduction in cut

2 Deducting NTS costs

Though some Non-Traffic Sensitive costs such as subscriber ports have been added to the prime cost of the access charge to date, such NTS costs are supposed to be deducted within 5 years

→ \60 billion of NTS cost to be deducted each year.



Development of IP-based Networks and Change of Market Environment

Rapid progress in development of IP-based networks

Change I

Structural change in communications networks

Change II

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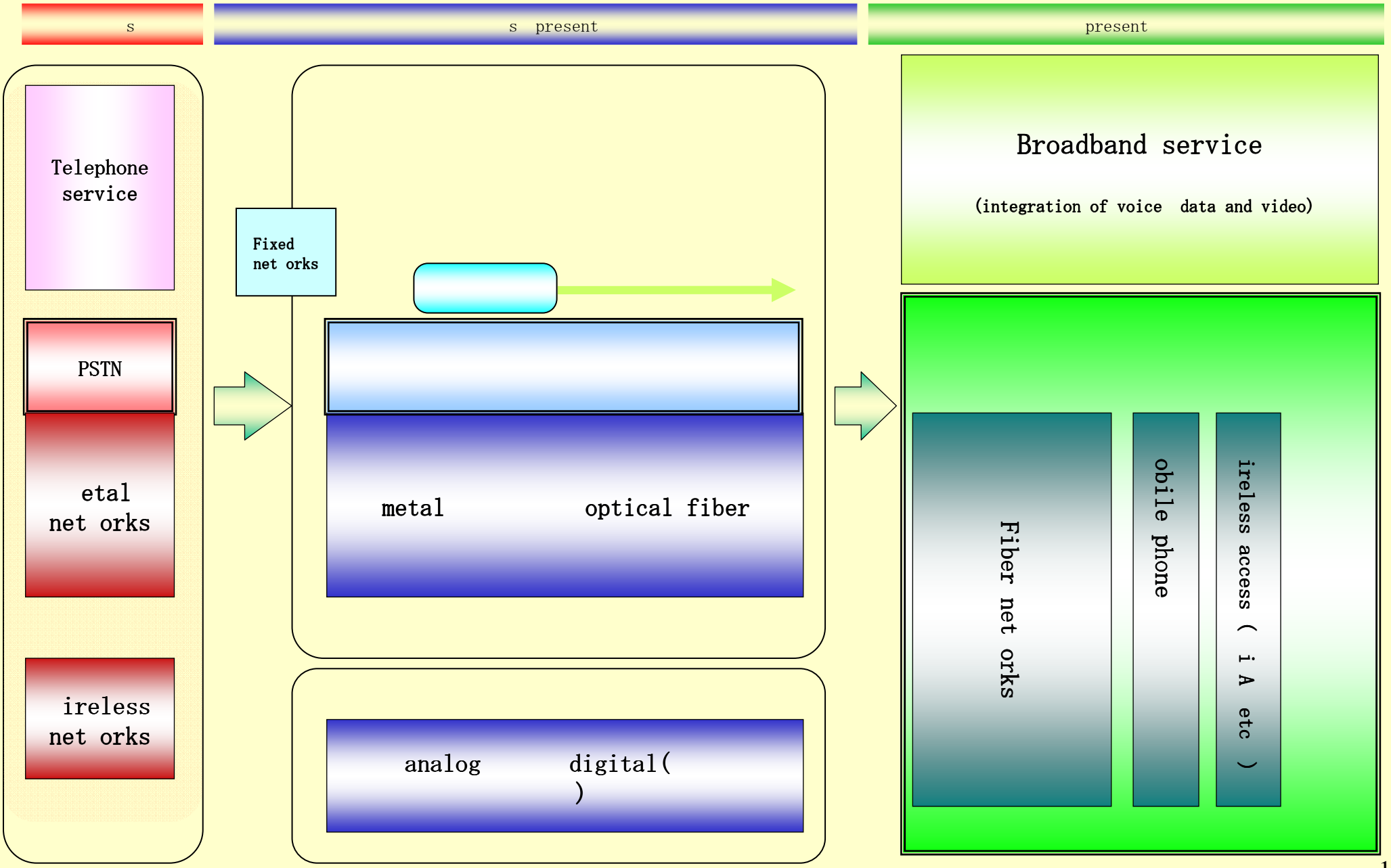
Change III

Diversity of business models

Change Structural Change in Communications Networks



```
ERROR: rangecheck
OFFENDING COMMAND: .buildcmap

STACK:

-dictionary-
/WinCharSetFFFF-VTT6134941Ct
/CMap
-dictionary-
/WinCharSetFFFF-VTT6134941Ct
```