

# Contents

## Chapter 1 The Accelerating IT Revolution: A Broadband-driven IT Renaissance

<b>Introduction</b> .....	4	(4) Information intensification in local governments' relationships with homes and businesses .....	22
<b>I. Building the IT Society</b>		(5) People's views of electronic government ..	23
<b>1. Broadband Development: the Basis of the IT Society Development</b> .....	5	(6) Electronic government trends overseas ..	23
(1) Rapid popularization of the Internet ..	5	<b>4. IT: Permeating People's Lives</b> .....	25
(2) Broadband access .....	6	(1) The information and communications equipment that people own. ....	25
(3) Increasing the speed of backbone circuits. ....	9	(2) How people use the Internet in their daily lives .....	25
(4) Growing availability of flat-rate service. .	9	(3) Shopping .....	26
(5) IP v6 activities .....	10	(4) Pastimes and entertainment. ....	26
(6) Diversification of Internet connection terminals .....	10	(5) Healthcare and social services .....	26
(7) Diversification of content; rising volume .....	10	(6) Work. ....	26
(8) Convergence of telecommunications and broadcasting. ....	11	(7) Information intensification in community life .....	26
(9) Digital broadcasting .....	12	<b>II. Issues in Realizing an IT Society</b>	
(10) Activities in other countries .....	12	<b>5. Seizing Digital Opportunity</b> .....	28
(11) Network users in the Broadband Era. .	13	(1) Regional differences in Internet use ..	28
<b>2. IT-driven Economic Revitalization</b> ..	15	(2) Differences in Internet use according to personal characteristics. ....	28
(1) The impact of IT on the macroeconomy ..	15	(3) Popularizing the Internet .....	28
(2) Internet businesses .....	15	(4) The digital divide between disabled users and others. ....	32
(3) E-commerce in the final consumption goods market .....	16	(5) Trends overseas .....	32
(4) E-commerce in the intermediate goods market. ....	16	<b>6. Facilitating the Spread and Development of E-Commerce</b> .....	33
(5) Internet-related businesses. ....	17	(1) New rules for promoting e-commerce. .	33
(6) IT-generated changes in the structure of business activity. ....	18	(2) Constructing a system for popularizing e-commerce .....	33
<b>3. Electronic Government</b> .....	20	(3) Ensuring the safety of e-commerce transactions .....	33
(1) Information intensification in the national government .....	20	(4) Internet governance; remaining problems .....	33
(2) Information intensification in local governments .....	20	<b>7. Human Resources Development</b> ....	35
(3) Information intensification in the national government's relationships with individuals and businesses .....	22	(1) Current state of information literacy. .	35
		(2) Enhancing information literacy. ....	35
		(3) Increasing the pool of IT technicians ..	36

<b>8. Ensuring Information Security</b> . . . . .	37	<b>10. Policies for Creating an Environment That Will Bring About the IT Society</b> . . . . .	42
(1) Illegal access; computer viruses . . . . .	37	(1) Formation of the world's most advanced information and communications network . . . . .	42
(2) Illegal and harmful information . . . . .	38	(2) Promoting education and nurturing human resources . . . . .	42
(3) Protecting personal information . . . . .	39	(3) Promoting e-commerce . . . . .	42
<b>III. Developing a National IT Strategy</b>		(4) Promoting information intensification in the national government and local governments . . . . .	43
<b>9. Mapping Out the National IT Strategy</b> . . . . .	40	(5) Ensuring the safety and reliability of advanced networks . . . . .	43
(1) Building a strategic system that will usher in an IT society . . . . .	40	(6) Comprehensive problems . . . . .	44
(2) Basic policies for promoting the IT society . . . . .	40		
(3) The MPHPT's comprehensive role in promoting the IT society . . . . .	41		

## Chapter 2 Current Status of Information and Communications

<b>1. The Information and Communications Industry</b> . . . . .	46	<b>3. Development of Information and Communications Services</b> . . . . .	52
(1) Gross domestic output . . . . .	46	(1) Telecommunications carriers . . . . .	52
(2) Gross value added . . . . .	46	(2) Telecommunications services . . . . .	52
(3) Employment . . . . .	46	(3) Broadcasters . . . . .	55
(4) Productivity . . . . .	47	(4) Broadcasting services . . . . .	55
(5) IT investment . . . . .	47	(5) Information flow . . . . .	56
(6) IT capital stock . . . . .	49	<b>4. Information and Communications Technology</b> . . . . .	57
(7) Capital investment . . . . .	49	(1) R&D investment . . . . .	57
(8) Sector reorganization . . . . .	50	(2) Level of research . . . . .	57
(9) Information and communications venture businesses . . . . .	50	<b>5. The Postal Services</b> . . . . .	58
<b>2. Information and Communications Networks</b> . . . . .	51	(1) Overview . . . . .	58
(1) Mobile telecommunications . . . . .	51	(2) Mail volume . . . . .	58
(2) Satellites . . . . .	51	(3) Services . . . . .	58
(3) Radio stations . . . . .	51	(4) Postage rates . . . . .	58
(4) The postal network . . . . .	51	<b>6. Trends Abroad</b> . . . . .	59
		(1) The United States . . . . .	59
		(2) Europe . . . . .	59
		(3) Asia . . . . .	59
		(4) Global alliances . . . . .	60

## Chapter 3 Trends in Information and Communications Policy

<b>1. The Government's Efforts to Bring About an Advanced Information and Communications Network Society</b> . . . . .	62	(2) New Action Plan for Economic Growth . . . . .	62
(1) A Policy Package for New Economic Development toward the Rebirth of Japan . . . . .	62	(3) Internet Fair 2001 Japan . . . . .	62
<b>2. Promoting Information and Communications Reform</b> . . . . .	63	(1) Introduction of a new tariff system . . . . .	63

(2) Dialing parity system . . . . .	63	(15) Space Internet technology. . . . .	70
(3) Telephone number portability. . . . .	63	(16) Engineering Test Satellite VIII. . . . .	70
(4) Review of the connection system . . . . .	63	(17) Sub-zenith satellite system . . . . .	70
(5) Promotion of new information and communications business . . . . .	64	(18) Advancing satellite communications, broadcasting, and in-orbit maintenance . . .	71
<b>3. Advances in Networks . . . . .</b>	<b>65</b>	(19) Earth observation technology . . . . .	71
(1) Development of network infrastructure. . .	65	(20) Comprehensive promotion of R&D . .	71
(2) Eliminating differentials in information and communications . . . . .	65	<b>6. Laying the Groundwork for Advanced Information and Communications. . . . .</b>	<b>72</b>
(3) Promotion of safety, reliability, and crisis management measures . . . . .	65	(1) Measures concerning the elderly and disabled . . . . .	72
(4) Promoting advances in broadcasting . . .	66	(2) Telework and SOHO. . . . .	72
<b>4. Promotion of Contents Production. . . . .</b>	<b>67</b>	(3) Improving telecommunications usage environment . . . . .	72
(1) Advancement of environment for contents production . . . . .	67	(4) Improving radio wave usage environment . . . . .	73
(2) Formation of a contents distribution market . . . . .	67	(5) Ensuring the sound development of broadcasting. . . . .	73
(3) Promotion of mobile web contents . . .	67	<b>7. Advances in Digitization of Public Areas. . . . .</b>	<b>74</b>
<b>5. Promoting Research and Development. . . . .</b>	<b>68</b>	(1) Laying the groundwork for electronic certification . . . . .	74
(1) Open topic proposal method . . . . .	68	(2) Development of public systems . . . . .	74
(2) Cooperation between industry and university . . . . .	68	(3) Local development through IT . . . . .	74
(3) Creative information and communications systems. . . . .	68	<b>8. Measures for Globalization . . . . .</b>	<b>75</b>
(4) Next-generation Internet . . . . .	68	(1) International policies . . . . .	75
(5) Super Internet . . . . .	68	(2) International cooperation . . . . .	75
(6) Japan Gigabit Network. . . . .	69	(3) Promoting international standardization . . . . .	75
(7) Ultra-high-speed photonic network technologies. . . . .	69	(4) Responding to the international distribution of telecommunications devices . . . . .	75
(8) Basic technology for petabit-level networks. . . . .	69	<b>9. Use of the Post Office Network and Service Upgrades . . . . .</b>	<b>76</b>
(9) Quantum information and communications technology . . . . .	69	(1) One-stop administrative services at post offices. . . . .	76
(10) New-generation mobile communications system . . . . .	69	(2) Postal savings network services . . . . .	76
(11) Intelligent traffic systems . . . . .	69	(3) Support for the elderly . . . . .	76
(12) Stratospheric platforms. . . . .	70	(4) Improvement of postal operations through a new network . . . . .	76
(13) Maritime intelligent traffic systems . . .	70		
(14) Global multimedia mobile communications technology . . . . .	70		