March 1, 2019

Company Name: Nippon Telegraph and Telephone Corporation
Representative: Jun Sawada, President and Chief Executive Officer
(Code No.: 9432, First section of Tokyo Stock Exchange)

SUBMISSION FOR APPROVAL OF BUSINESS OPERATION PLAN FOR THE FISCAL YEAR ENDING MARCH 31, 2020

Nippon Telegraph and Telephone Corporation ("NTT") and its wholly-owned subsidiaries, Nippon Telegraph and Telephone East Corporation ("NTT East") and Nippon Telegraph and Telephone West Corporation ("NTT West"), today submitted their respective business operation plans for the fiscal year ending March 31, 2020 to the Minister for Internal Affairs and Communications for approval.

For more details, please see the attached press releases by NTT, NTT East and NTT West.

For further inquiries, please contact:
Takumi Matsumoto or Takayuki Kimura
Investor Relations Office
Finance and Accounting Department
Nippon Telegraph and Telephone Corporation
Contact us by email:
http://www.ntt.co.jp/ir/form_e/ref_contact.html

This English text is a translation of the Japanese original. The Japanese original is authoritative.

March 1, 2019

Submission for Approval of Business Operation Plan

for the Fiscal Year Ending March 31, 2020

Nippon Telegraph and Telephone Corporation ("NTT") today submitted its business operation plan (non-consolidated) for the fiscal year ending March 31, 2020 to the Minister for Internal Affairs and Communications for approval.

For more information, please contact:
Business Planning Group
Corporate Strategy Planning Department
Nippon Telegraph and Telephone Corporation
Tel: +81-3-6838-5151
E-mail: jigyou@hco.ntt.co.jp

In information and communications services, in addition to the enhancement of the broadband communications environment, including FTTH and LTE, and the proliferation and penetration of smartphones, tablets and other devices, the growing use of cloud computing and advances in new technologies such as AI, Big Data, and IoT are rapidly progressing. As a result, various types of data are being gathered, and through efforts to improve the data usage environment, data analysis and utilization are also advancing, enabling the creation and provision of new value in a wide range of fields including improvements in the convenience of people's lives and greater efficiency in each industry.

In this kind of information and communications services market, a number of service providers have been working to generate an increasing variety of innovative new services through business partnerships that go beyond the boundaries of industry sectors and business types, looking ahead to the Olympic and Paralympic Games Tokyo 2020, and also for sustainable economic growth afterwards, contributing to the vitalization of local economies and resolving Japan's social issues, such as the low birthrate and aging population.

At the same time, the strengthening of countermeasures against increasingly sophisticated and complex security threats and for disaster prevention demonstrate that the role of information and communications services in achieving the secure and reliable operation of social systems and enriching people's lifestyles is becoming increasingly important.

To help ensure that universal services are maintained amid this evolving information and communications environment, NTT intends to provide all necessary advice, coordination, and other assistance to Nippon Telegraph and Telephone East Corporation and Nippon Telegraph and Telephone West Corporation (the "regional companies"). NTT will also endeavor to promote research and development in information communications technology, which serves as a foundation for telecommunications.

In addition, based on NTT Group's Medium-Term Management Strategy entitled, "Your Value Partner 2025" announced in November 2018, NTT Group, in its role as "Your Value Partner," will continue to promote initiatives through its business operations and work with its partners to resolve social issues. Specifically, NTT will promote management that furthers the development of the entire group, by working to support its customers' digital transformations, starting with its promotion of the B2B2X model, accelerate its own digital transformation, leverage its talent, technologies and assets, promote ESG management and enhance the returns of shareholders to improve corporate value.

As NTT undertakes these initiatives, it intends to continue to ensure fair competitive conditions under the existing legal framework.

Based on these fundamental concepts, in the management of its business operations for the fiscal year ending March 31, 2020, NTT will work towards the stable growth of the business by promoting the expansion of the B2B2X model, which leverages digital services and digital management, the offering of pre-commercial service of the fifth-generation mobile communication system 5G, the advancement of global business competitiveness and accelerating growth and work on new urban solutions that promote urban digitalization.

NTT will seek to ensure the stable development of its operations in the future, and to return the fruits of these efforts to customers, shareholders and society by providing an advanced broadband network, creating a variety of services, and engaging in research and development activities that will produce the technology and human capital to support a new business model by sustaining and strengthening open innovation.

Furthermore, NTT will advance additional disaster relief initiatives to maintain safe and reliable ICT infrastructure.

Based on the concepts outlined above, pursuant to the business operation plan for the fiscal year ending March 31, 2020, NTT expects to manage its business by prioritizing the following activities, and doing so in a flexible manner so as to respond to changes in the business environment.

1. Advice, coordination, and other assistance

NTT will aim to exercise appropriate shareholder rights and provide all necessary advice, coordination and other assistance to its regional companies to ensure the maintenance of high-quality and stable universal services. Such assistance will include planning and coordination relating to the quality and upgrading of telecommunications networks, deployment of control and coordination capabilities in the event of natural disasters and other emergencies, efficient financing, and formulation of policies for material procurement.

NTT will support the efforts of each NTT Group company, including the regional companies, to streamline their business operations and expand their business opportunities, and will assist with the development of human capital that will form the core of NTT Group as well as compliance with applicable regulations.

2. Promotion of basic research and development

NTT will work to harmonize network platform technologies, technologies that provide a basis for new services and applications, as well as general advanced and basic technologies, while focusing its efforts on higher value-added research and development. NTT will also be actively involved in innovation in collaboration with business partners, starting with other research and development institutions, in technology exchanges both in Japan and abroad and expansion and standardization activities.

NTT will seek to further increase research efficiency and ensure the continuous execution of basic research and development efforts through revenues from basic R&D generated from the regional companies and other NTT Group companies that use the fruits of these efforts and bear related expenses on an ongoing basis.

Specifically, NTT will give priority to the following areas of NTT's research and development activities:

(1) Infrastructure-related research and development
In order to develop an information network infrastructure to "connect" everything, NTT will undertake research and development to realize a highly profitable information network that can flexibly respond to the various needs of the customers and service providers who use it.

Specifically, NTT will pursue research and development related to, among other things, technology for transmission-related functions that combines general-use equipment to develop a flexible network, a server architecture with high scalability and redundancy in which the scale can be changed flexibly using software in response to demand, control technology for these network functions and communication technology and equipment to facilitate the smooth migration of voice networks to IP-based networks.

NTT will also pursue research and development for technology related to the maintenance of communications facilities, a vital part of social infrastructure, research and development that supports disaster-resistant networks as well as research and development directed toward realizing

common network platforms usable in different fields such as the fusion of various services such as voice and videos that make use of the unique characteristics of IP networks.

(2) User-related research and development

With a view toward creating advanced services that enrich the lives of and provide comfort to customers, NTT plans to undertake research and development in technologies that integrate telecommunications and computer technology, such as media processing, personalization, cloud services and security.

Specifically, NTT will promote research and development in the following technologies: technology for the real-time transmission of highly immersive videos that makes comprehensive use of media synchronization technology and next-generation video compression technology, technology that detects users' circumstances and intentions and enables natural dialogue using the "corevo" AI technology invented by NTT , cloud-based device cooperation control platforms that enable the linking of sensors and robots that support AI and IoT, and security-related technology to counteract cyberattacks such as authentication and encryption in anticipation of the change in environment due to the development of IoT.

NTT also intends to engage in activities that provide support to other companies, universities and other institutions with the goal of raising the cybersecurity skill level in all industries while simultaneously developing security experts within NTT Group.

(3) Research and development in basic technologies
NTT is committed to contributing to innovative improvement and development of information and telecommunications in Japan to ensure a leading position in technology research that will support the future of telecommunications. To fulfill these commitments, NTT will undertake research and development activities in basic technologies.

Specifically, this will include research in areas such as: the next generation extra high-speed fiber-optic communications technologies that aim to realize a high capacity fiber-optic communications infrastructure that can support connectivity of 1 Tbps, and optical devices and integrated nanophotonics technologies.

NTT will also pursue research on innovative principles and new concepts, including quantum computing-related technology that exceeds current information processing capabilities, materials and devices that account for environmental impact and improvement of convenience and a scientific analysis of the human sensory, physical and emotional mechanisms in various scenarios.

The following table presents an overview of NTT's capital investment plan for the above-mentioned activities.

Capital Investment Plan for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Expected investment
1. R&D facilities	19
2. Other facilities	3
Total	22

Attachment 1

Revenues and Expenses Plan for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Amount
Revenues	
Operating revenues	613 *
Non-operating revenues	21
Total revenues	634
Expenses	
Operating expenses	137
Non-operating expenses	23
Total expenses	160
Recurring profit	474

* This figure includes revenues from basic R&D of 100 billion yen and revenues from Group management and other sources of 25 billion yen.

Attachment 2

Planned Sources and Applications of Funds for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Amount
Sources:	
Operational:	548
Operating revenues	527
Non-operating revenues	21
Financial:	477
Long-term loans and bonds	205
Other financial income	272
Estimated consumption tax receipts	13
Balance brought forward from previous fiscal year	1
Total	1,039
Applications:	
Operational:	137
Operating expenses	116
Non-operating expenses	21
Financial:	712
Capital investments	22
Other financial expenses	690
Account settlement expenses	179
Provisional consumption tax payments	10
Balance carried forward to following fiscal year	1
Total	1,039

This English text is a translation of the Japanese original. The Japanese original is authoritative.

March 1, 2019

Submission for Approval of Business Operation Plan for the Fiscal Year Ending March 31, 2020

Nippon Telegraph and Telephone East Corporation ("NTT East") today submitted its business operation plan (non-consolidated) for the fiscal year ending March 31, 2020 to the Minister for Internal Affairs and Communications for approval.

For inquiries, please contact:
Corporate Strategy Planning Department
Nippon Telegraph and Telephone East Corporation
Tel: +81-3-5359-2997

Information and communications services have become an essential part of the infrastructure of socio-economic activity. These services are expected to make significant contributions to increasing the convenience of people's daily lives and the revitalization of local communities, while also improving corporate efficiency, creating new businesses and enhancing industry-wide international competitiveness.

The information and communications market is undergoing structural changes beyond the existing framework, including an increasing shift to broadband services and globalization, AI, Big Data and IoT utilization, cloud computing development, penetration of high-speed wireless and Wi-Fi compatible devices such as smartphones and tablet devices, and widespread use of applications that enable free phone calls and messaging.

Regional telecommunications markets are also changing dramatically. The competition in services based on fiber-optic access is intensifying. New services using a variety of wireless devices are also expanding. These lead to diversification in the way customers use these devices due to the expansion of the volume of data communications.

Amid such a challenging and volatile business environment, as a carrier with an important leadership role in the information and communications industry, NTT East will aim to continue to provide high-quality, stable universal services, work to develop a sophisticated and strong information and communications network that is responsive to disasters, cybersecurity threats and the increasing volume of data traffic, and to promptly restore services in times of large-scale natural disasters and other calamities in order to ensure their reliability as part of the social infrastructure, and respond to network migration appropriately. NTT East will do this while further striving to ensure that it strictly abides by fair competition and seeking to secure a stable and solid foundation for its business, as well as complying with applicable regulations.

Furthermore, NTT East will endeavor to enhance the broadband network environment and further expand fiber-optic access through offering services and products that leverage the advantages of the next-generation network ("NGN") with customer-friendly and long-term appealing pricing. NTT East will contribute to the further enrichment and sustained development of society by committing to the resolution of various economic and social issues, including the low birthrate and related population decline and reduction of CO2 emissions, through various measures that facilitate the use of ICT to contribute to the vitalization of local economies, work style reforms and improvement of productivity and convenience, among other things.

With regard to the management of its business operations for the fiscal year ending March 31, 2020, NTT East plans to continue expanding and promoting the use of fiber-optic access, and aims to achieve the upgrade and strengthening of its broadband network environment through the NGN on the basis described above and contribute to the advancement of digital transformation. These objectives will be achieved through the creation of new uses for ICT that are closely connected to daily domestic life and community activities, the enhancement of the ICT environment through, among other things, the use of Wi-Fi, and the development and provision of services for business users.

NTT East plans to offer an even wider range of services including optical IP telephony services and video services as well as maintenance and support on this network infrastructure. As an "ICT solutions company that walks hand-in-hand with its community," NTT East at the same time aims to develop and provide a variety of high value-added and user-friendly services in order to provide resolutions to customer problems through further collaboration with companies and research institutions in diverse industries. In addition, NTT East will provide service providers in a wide range of fields with fair and equal services on the basis of its world-class network through the Hikari Collaboration Model, as well as support a variety of value creation opportunities.

At the same time, NTT East will also take steps to build a stable and stronger management base and to ensure steady business growth into the future by further increasing operating efficiency and productivity. NTT East will strive to return the results of these measures to customers, the local community and, through its holding company, to its shareholders.

NTT East plans to manage its business in the fiscal year ending March 31, 2020 on the basis of the above outlined concepts, emphasizing the items outlined below, while maintaining the flexibility needed to respond to changes in the business environment.

1. Voice transmission services

(1) Telephone subscriptions

NTT East will aim to respond promptly to all demands for telephone subscriptions, including the relocation of existing lines. The number of subscriptions is projected to total approximately 7.51 million by the end of the fiscal year ending March 31, 2020.

Item	Planned number (subscriptions)
Additional installations	(0.60 million)
Relocations	0.88 million

(2) Social welfare telephones

As social welfare programs continue to expand and develop, social demand for welfare-oriented telecommunications services has increased. In response to this need, NTT East plans to continue to promote the provision of welfare-oriented products, such as its “Silver Phone series” (“Anshin” (relief), “Meiryo” (clearness), “Hibiki” (sound) and “Fureai” (communication)).

Item	Planned number (units)
Silver Phones	
Anshin (relief)	2,500
Meiryo (clearness)	0

(3) Public telephones

NTT East plans to continue to meet the minimum requirements for providing a public means of communication for safety and when outdoors. NTT East will also strive to continue to improve convenience by, among other things, publicizing the locations of public telephones in order to

promote their increased usage and to prepare for disasters and other emergencies. The number of public telephone units is projected to total approximately 69,000 by the close of the fiscal year ending March 31, 2020.

Item	Planned number (units)
Public telephones	(1,000)

(4) Integrated digital communications services

The numbers of INS-Net 64 and INS-Net 1500 subscriber lines are projected to total approximately 888,000 and 10,000, respectively, by the close of the fiscal year ending March 31, 2020.

Item	Planned number (subscriptions)
INS-Net 64 subscriber lines	(86,000)
INS-Net 1500 subscriber lines	(1,000)

2. Data transmission services

To respond to the increasing demand for broadband services, NTT East will endeavor to expand its fiber-optic access services by targeting the appealing power of services unique to fiber-optic technologies, such as Hikari Denwa and video services, and will aim to provide a wide range of other services. The number of FLET's Hikari subscriptions is projected to total approximately 12.29 million by the close of the fiscal year ending March 31, 2020.

Item	Planned number (subscriptions)
FLET'S Hikari*	0.40 million

*This figure for FLET'S Hikari includes subscribers to the Hikari Collaboration Model.

3. Leased circuit services

Subscriptions for conventional leased circuit services and high-speed digital transmission services are projected to total approximately 98,000 and 27,000, respectively, by the close of the fiscal year ending March 31, 2020.

Item	Planned number (subscriptions)
Conventional leased circuit services	(4,000)
High-speed digital transmission services	(11,000)

4. Telegraph services

NTT East will conduct maintenance of its systems in order to promote the enhancement and operational efficiency of its telegraph services.

5. Improvements and advances in telecommunications facilities

(1) Optical access network

NTT East plans to promote the efficient shift to fiber optics in its access network in response to, among other things, the demand for broadband services.

Item	Planned number (million fiber km)
Optical subscriber cables	1.0

(2) Telecommunications network

In its telecommunications network, NTT East will aim to upgrade network services and improve network efficiency, among other things, while continuing its efforts to meet demand for broadband services.

(3) Disaster prevention measures

NTT East expects to take necessary measures in response to disasters. Such measures would include disaster prevention measures to prepare for damage to telecommunications equipment and facilities, securing lines for emergency communications, strengthening its organizational structure for crisis management and restoring systems in the event of large-scale disasters, and supporting information distribution after a disaster.

(4) Underground installation of transmission cables

In order to improve the reliability of communications facilities, ensure safe and pleasant roads and other transit areas, and enhance the appearance of the urban landscape, NTT East will work, in coordination with the national and local governments and with other companies, to install transmission cables underground.

(5) Facility maintenance

NTT East will aim to provide stable and high-quality services by conducting cable maintenance and replacement, and by ensuring quality customer services, safe operations, harmonization with the social environment and stabilization of communications systems.

NTT East will seek to minimize costs by making full use of existing equipment and facilities in improving and upgrading its communications facilities.

6. Promotion of research and development activities

In order to further stabilize and strengthen its management base and to provide better communication services to its customers, NTT East will continue to promote research and development in network systems and access systems, with the aim of advancing its telecommunications networks. In addition, in order to offer customers more choices while providing a range of safe and convenient services through telecommunications networks, NTT East will also conduct research and development in such areas as applied AI technology, IoT platforms, security, and in new market development including, among other things, value-added businesses utilizing telecommunications networks.

The following tables present an overview of the business plans for the above principal services and capital investment plans.

Table 1

Principal Services Plan for the Fiscal Year Ending March 31, 2020

Type of service	Plan
Voice transmission services	
Telephone subscriptions	
Additional installations	(0.60 million) subscriptions
Relocations	0.88 million subscriptions
Social welfare telephones (Silver Phones)	2,600 units
Public telephones	(1,000) units
Integrated digital communications services	
INS-Net 64 subscriber lines	(86,000) subscriptions
INS-Net 1500 subscriber lines	(1,000) subscriptions
Data transmission services	
FLET'S Hikari* *Including the Hikari Collaboration Model	0.40 million subscriptions
Leased circuit services	
Conventional leased circuit service	(4,000) subscriptions
High-speed digital transmission services	(11,000) subscriptions

Table 2

Capital Investment Plan for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Expected investment
1. Expansion and improvement of services	230 *
(1) Voice transmission	131
(2) Data transmission	13
(3) Leased circuits	85
(4) Telegraph	1
2. Research and development facilities	2
3. Common facilities and others	18
Total	250

* This figure includes approximately 85 billion yen to be invested in the fiber-optic access network.

Attachment 1
(Reference)

Revenues and Expenses Plan for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Amount
Revenues	
Operating revenues	1,584
Voice transmission	492
Data transmission	253
Leased circuits	491
Telegraph	9
Others	339
Non-operating revenues	7
Total revenues	1,591
Expenses	
Operating expenses	1,384
Operating costs	1,077
Taxes and dues	73
Depreciation	234
Non-operating expenses	2
Total expenses	1,386
Recurring profit	205

Attachment 2
(Reference)

Planned Sources and Applications of Funds for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item		Amount
Sources:		
Operational:		1,804
	Operating revenues	1,797
	Non-operating revenues	7
Financial:		0
	Proceeds from issuance of long-term loans and bonds	0
	Other financial income	0
Estimated consumption tax receipts		138
Balance brought forward from previous fiscal year		181
	Total	2,123
Applications:		
Operational:		1,402
	Operating expenses	1,400
	Non-operating expenses	2
Financial:		316
	Capital investments	250
	Other financial expenses	66
Account settlement expenses		202
Provisional consumption tax payments		105
Balance carried forward to following fiscal year		98
	Total	2,123

This English text is a translation of the Japanese original. The Japanese original is authoritative.

March 1, 2019

Submission for Approval of Business Operation Plan for the Fiscal Year Ending March 31, 2020

Nippon Telegraph and Telephone West Corporation ("NTT West") today submitted its business operation plan (non-consolidated) for the fiscal year ending March 31, 2020 to the Minister for Internal Affairs and Communications for approval.

For inquiries, please contact:
Business Management Unit,
Public Relations Office
Nippon Telegraph and Telephone West Corporation
Tel: +81-6-4793-2311

Information and communications services are expected to make significant contributions to the invigoration and increased efficiency of social and economic activities, improvements in lifestyle convenience and the vitalization of local economies through the formation of a new ICT society from the development of AI, Big Data and IoT. The government and the private sector are working in partnership to achieve these goals.

Moreover, the information and telecommunications market is undergoing a structural change as a result of the shift to broadband and globalization, as well as the spread of smart devices and social media. The market is catering to increasingly sophisticated and diversified needs and patterns of usage by, among other things, utilizing Big Data and IoT, as well as expanding platform services and cloud services. Regional telecommunications markets are also undergoing significant changes, such as the convergence of fixed and mobile services, and of telecommunications and broadcasting, and the introduction of new services as a result of the use of a diverse range of wireless devices. This is due in part to an increase in competition not only between the providers of fiber-optic access services and cable television-based broadband services but also between the various services made available by faster mobile connections.

Within this challenging and dramatically changing business environment, NTT West is striving to promote the smooth migration to IP-based networks and enhance the fiber-optic access network that is the backbone of ICT, as well as continue to provide high-quality, stable universal services. NTT West also aims to contribute to the development of fair telecommunications markets and promote applied research and development to ensure the reliability and public utilization of telecommunications services.

While strictly adhering to fair terms of competition within the current legal framework and encouraging thorough compliance, NTT West will also aim to realize a broadband network environment that will enable customers to connect "anytime, anywhere and with anyone or anything" and "in comfort, safety and with peace of mind." NTT West will achieve this by offering an open next-generation network ("NGN") that utilizes the unique characteristics of fiber optics and by expanding its Wi-Fi platform, among other initiatives. At the same time, NTT West will endeavor to utilize ICT to contribute to the realization of a convenient and prosperous society through the creation of a new lifestyle by expanding the use of fiber-optic services and through developing solutions for issues facing society, including the provision of "various services that match each customer's patterns of usage."

These are the basic concepts that underlie the business plan for the fiscal year ending March 31, 2020. In its broadband services, NTT West expects to provide a more comfortable, safer and more secure NGN. In addition, NTT West will strive to provide customers with greater convenience by developing Hikari Denwa services that make use of fiber-optic access lines, video distribution services, and services for corporate users, as well as by providing the Hikari Collaboration Model to a wide-range of service providers in an appropriate and fair manner, and promoting collaborations in order to create new services. NTT West also plans to maintain its community-oriented sales activities in order to respond to customers' opinions and requests in an appropriate and timely manner, and also develop ICT solutions aimed at resolving social issues by leveraging management resources including the latest technology, facilities and bases, provide the most advanced services to local communities, improve the quality of services for customers and contribute to the vitalization of local communities and economies.

In conjunction with this, and in recognition of its responsibilities as an operator of social infrastructure, NTT West will aim to contribute to the creation of a safe and secure society by seeking to ensure the stable provision of its broadband access, Hikari Denwa and other services, attempting to prevent equipment failures, strengthening facilities countermeasures in preparation for possible large-scale disasters, responding vigorously to restore service and providing victims and affected individuals with various means of communication in times of disaster, and bringing all of its group resources to bear on activities and services that will earn the continued trust of its customers. NTT West will strive to continue to improve the efficiency of its operations and to achieve a stable and strong management base by accelerating its own digital transformation.

NTT West will work to lay the foundations for the stable development of its business into the future by proactively working to facilitate connectivity and ensure the openness of its networks, actively promoting human resource development, expanding into new business areas in coordination with its group companies, and making a positive contribution to reducing its burden on the environment. As these policies and programs bear fruit, NTT West will endeavor to share the benefits with its customers, local communities and, through its holding company, its shareholders.

NTT West plans to manage its business in the fiscal year ending March 31, 2020 on the basis of the above-outlined concepts, emphasizing the items outlined below, while maintaining the flexibility needed to respond to changes in the business environment.

1. Voice transmission services

(1) Telephone subscriptions

NTT West will aim to promptly respond to all demands for telephone subscriptions, including the relocation of existing lines, and forecasts that it will have approximately 7.68 million subscriptions by the close of the fiscal year ending March 31, 2020.

Item	Projected number (subscriptions)
Additional installations	(0.57) million
Relocations	0.80 million

(2) Social welfare telephones

As social welfare programs continue to expand and develop, social demand for welfare-oriented telecommunications services has increased. In response to this need, NTT West plans to continue to promote the provision of welfare-oriented products, such as its "Silver Phone series" ("Anshin" (relief), "Meiryo" (clearness), "Hibiki" (sound) and "Fureai" (communication)).

Item		Projected number (units)
Silver Phone	Anshin (relief)	2,000
	Meiryo (clearness)	100

(3) Public telephones

NTT West plans to continue to maintain public telephone facilities to ensure public safety and meet the minimum requirements for providing a public means of communication. At the same time, NTT West will review its plan with respect to underutilized public telephones, and will also strive to provide social welfare services by continuing the maintenance of wheelchair-accessible public telephone booths. The number of public telephone units is projected to total approximately 83,000 by the close of the fiscal year ending March 31, 2020.

Item	Projected number (units)
Public telephones	(2,000)

(4) Integrated digital communications services

The total numbers of INS-Net 64 subscriber lines and INS-Net 1500 subscriber lines are projected to be approximately 0.913 million and 6,000, respectively, by the close of the fiscal year ending March 31, 2020.

Item	Projected number (subscriptions)
INS-Net 64 subscriber lines	(73,000)
INS-Net 1500 subscriber lines	(1,000)

2. Data transmission services

To respond to the increasing demand for broadband services, NTT West will endeavor to expand its fiber-optic access services and provide a wider range of services. The number of FLET's Hikari subscriptions is projected to total approximately 9.44 million by the close of the fiscal year ending March 31, 2020.

Item	Projected number (subscriptions)

FLET'S Hikari*	0.20 million

*This figure for FLET'S Hikari includes subscribers to the Hikari Collaboration Model.

3. Leased circuit services

Subscriptions for conventional leased circuit services and high-speed digital transmission services are projected to total approximately 106,000 and 14,000, respectively, by the close of the fiscal year ending March 31, 2020.

Item	Projected number (subscriptions)
Conventional leased circuit services	(3,000)
High-speed digital transmission services	(17,000)

4. Telegraph services

NTT West will conduct maintenance of its systems in order to promote the enhancement and operational efficiency of its telegraph services.

5. Improvement and advances in telecommunications facilities

(1) Optical access networks

NTT West plans to efficiently promote the shift to the fiber optics in its access network in response to, among other things, the demand for broadband services.

Item	Projected number (million fiber km)
Optical subscriber cables	0.45

(2) Telecommunications network

In its telecommunications network, NTT West will aim to upgrade network services and improve network efficiency, among other things, while working to meet demand for broadband services.

(3) Disaster prevention measures

NTT West expects to take necessary measures in response to disasters. Such measures would include disaster prevention measures to prepare for damage to telecommunications equipment and facilities, securing lines for emergency communications, strengthening its organizational structure for crisis management and restoring systems in the event of large-scale disasters, and supporting information distribution after a disaster.

(4) Underground installation of transmission cables

In order to improve the reliability of communications facilities, ensure safe and pleasant roads and other transit areas, and enhance the appearance of the urban landscape, NTT West will work in coordination with the national and local governments and with other companies in installing transmission cables underground.

(5) Facility maintenance

NTT West will conduct necessary cable maintenance and replacement to provide stable and high-quality services and ensure quality customer services, safe operations, harmonization with the social environment and stabilization of communications systems.

NTT West will seek to minimize costs by making full use of existing equipment and facilities in improving and upgrading communications facilities.

6. Promotion of research and development activities

With the aim of utilizing ICT and IoT technology to find solutions to social problems, NTT West will promote experimental and research measures and policies for technical areas by focusing on the following three points, among others.

(1) Review towards the utilization of network technologies for IoT and AI technology.

(2) Review towards the realization of cost-effective, high-speed and high capacity networks and a sophisticated and efficient operations practice.

(3) Development of a security countermeasure technology that promotes the utilization of data and devices in response to the change in the diversifying customer environment, and the review of enhancing countermeasures against new threats.

The following tables present an overview of the business plan for the above principal services and capital investment plans.

Table 1

Principal Services Plan
for the Fiscal Year Ending March 31, 2020

Type of service	Plan
Voice transmission services	
Telephone subscriptions	
Additional installations	(0.57 million) subscriptions
Relocations	0.80 million subscriptions
Social welfare telephones (Silver Phone)	2,100 units
Public telephones	(2,000) units
Integrated digital communications services	
INS-Net 64	(73,000) subscriptions
INS-Net 1500	(1,000) subscriptions
Data transmission services	
FLET'S Hikari*	0.20 million subscriptions
* Including the Hikari Collaboration Model	
Leased circuit services	
Conventional leased circuit services	(3,000) subscriptions
High-speed digital transmission services	(17,000) subscriptions

Table 2

Capital Investment Plan for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Expected investment
1. Expansion and improvement of services	214 *
(1) Voice transmission	130
(2) Data transmission	15
(3) Leased circuits	67
(4) Telegraph	2
2. Research and development facilities	2
3. Common facilities and others	14
Total	230

* This figure includes approximately 65 billion yen to be invested in the fiber-optic access network.

Attachment 1

Revenues and Expenses Plan
for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Amount
Revenues	
Operating revenues	1,340
Voice transmission	473
Data transmission	198
Leased circuits	385
Telegraph	10
Others	274
Non-operating revenues	4
Total	1,344
Expenses	
Operating expenses	1,235
Operating costs	966
Taxes and dues	65
Depreciation	204
Non-operating expenses	8
Total	1,243
Recurring profit	101

Attachment 2

Planned Sources and Application of Funds for the Fiscal Year Ending March 31, 2020

(Billions of yen)

Item	Amount
Sources:	
Operational:	1,459
Operating revenues	1,455
Non-operating revenues	4
Financial:	205
Proceeds from issuance of long-term loans and bonds	205
Other financial income	0
Estimated consumption tax receipts	118
Balance brought forward from previous fiscal year	5
Total	1,787
Applications:	
Operational:	1,154
Operating expenses	1,146
Non-operating expenses	8
Financial:	435
Capital investments	230
Other financial expenses	205
Account settlement expenses	97
Provisional consumption tax payments	96
Balance carried forward to following fiscal year	5
Total	1,787