Project Overview

Creating a supportive environment for the development of wide-ranging communication and information services for foreign visitors

Social Landscape / Social Agenda

Promoting Japan as a tourism-oriented country to boost the domestic economy

Tourism-related industries are growing around the globe and should be recognized as one of the strategic pillars of Japan's economic growth. We need to improve in areas including infrastructure and services to substantially increase the number of foreign visitors to the country.

Long-term Vision

Enabling foreign tourists to enjoy their stay in Japan without the stress that can come from confronting language differences and cultural barriers

During the Tokyo Games

Ensuring foreigners can enjoy the Games and sightseeing in Japan by reducing the stress they may feel from traveling or trying to communicate

Three Priorities

1 Social Impact

Promoting a clear new image of a world-class cosmopolis in which everyone can freely and comfortably travel around and engage with each other regardless of their language or cultural background.

2 Hospitality during the Games

Greeting every visitor with the same hospitality and high-quality service, regardless of their language or cultural background.

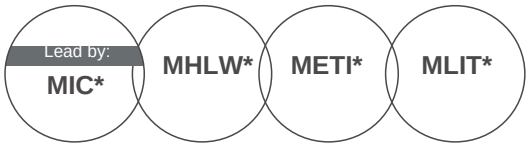
3 Shared Value

Improving and extending relevant infrastructure across the country to attract even more foreign tourists.

Concept for 2020

Hospitality Innovation 2020

Smart Hospitality



* MIC : Ministry of Internal Affairs and Communications MHLW :
* Ministry of Health, Labour and Welfare
* METI : Ministry of Economy, Trade and Industry
* MLIT : Ministry of Land, Infrastructure, Transport and Tourism

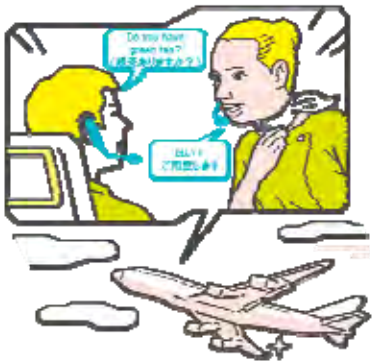
Providing assistance to foreign visitors to help them avoid stress related to travel and communication

Objective and Conceptualization

To enable every visitor to transcend linguistic and cultural differences to share in the thrill and excitement of the 2020 Olympic and Paralympic Games

Scenario 1 International Airport

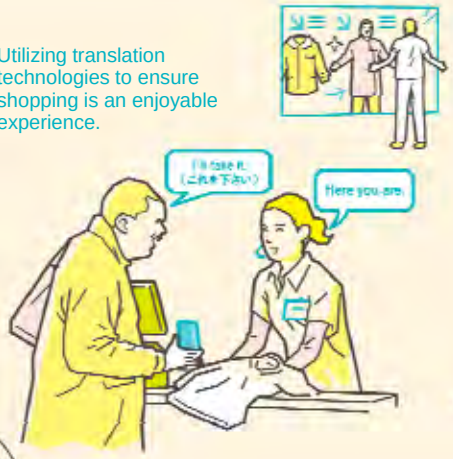
Enabling easy communication with cabin crew.



Making travel more comfortable, by ensuring visitors can easily and quickly find the trains to their destinations.

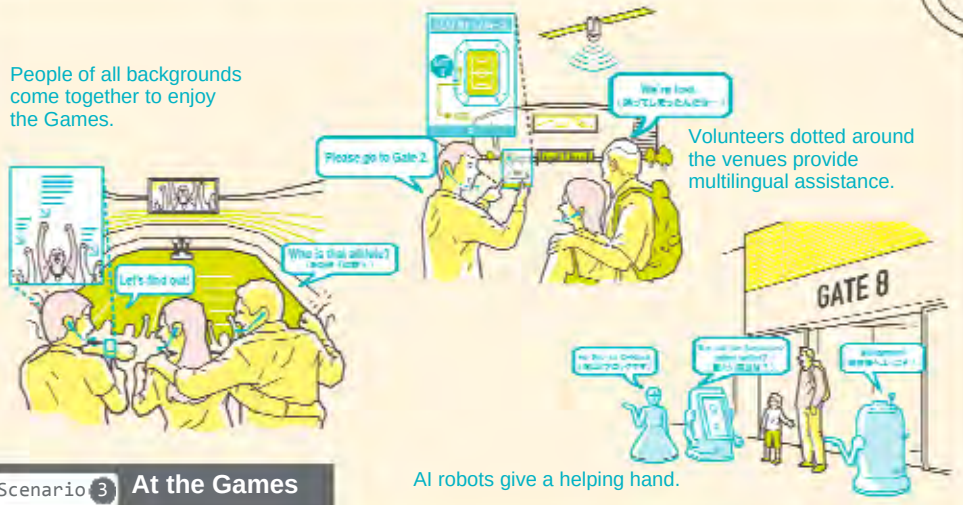
Scenario 2 In town

Utilizing translation technologies to ensure shopping is an enjoyable experience.



Ensuring smooth communication in case of injury, sudden illness, or other emergencies.

People of all backgrounds come together to enjoy the Games.

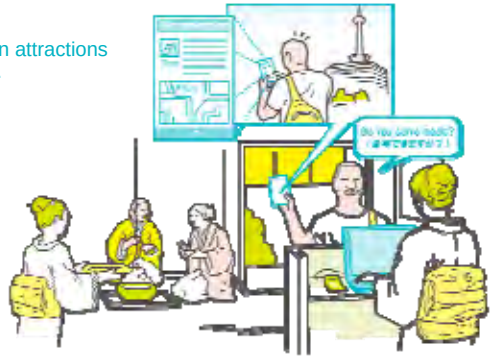


Volunteers dotted around the venues provide multilingual assistance.

AI robots give a helping hand.

Scenario 3 At the Games

Discover little-known attractions in new destinations.



Enabling easy communication to make traveling outside of Tokyo even more exciting

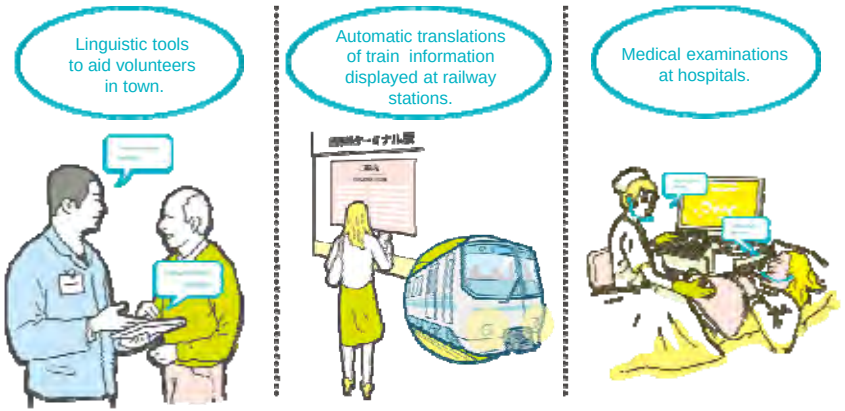
Scenario 4 Tourism

Course of Action Toward 2020

Promoting various initiatives to enable foreign visitors to enjoy their stay in Japan without feeling the stress from the language barriers and traveling through unfamiliar places. Initiatives include a speech translation system, spatial information applications including digital maps, service improvement platforms, and AI robots.

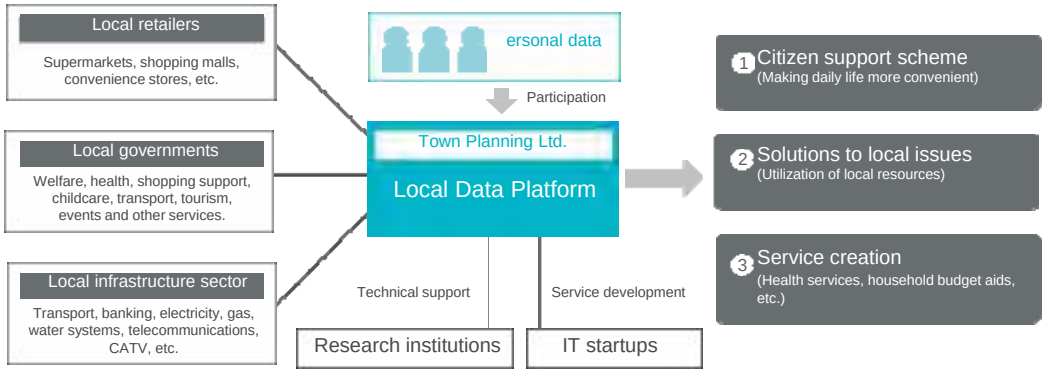
R&D on a multilingual speech translation system

Potential real-life applications during the Games



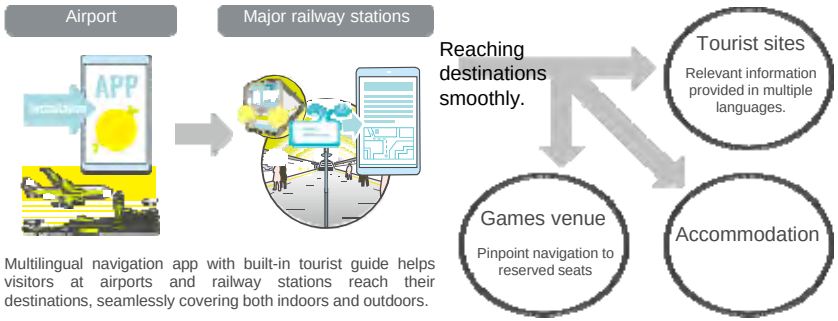
Developing a community-based information-sharing platform to improve services, building on data such as purchase histories and travel logs.

Example of data platform applications



Implementing spatial information infrastructure, such as digital maps

Example of potential services to be rolled out ahead of the Games



Multilingual navigation app with built-in tourist guide helps visitors at airports and railway stations reach their destinations, seamlessly covering both indoors and outdoors.

Adopting systems for AI robots

Examples of potential robotic systems

Attendant robot

Robot “CONCIERGE”
(co-developed with Vector Ltd.)

Hino-city
“OMOTENASHI Robot”

Initiatives and Partners

Initiative	Cooperating Organizations	Details
Research and Development		
R&D on multilingual speech translation system	MIC* Tokyo Metropolitan Gov. (Bureau of Tokyo 2020 Olympic and Paralympic Games Preparation) Private companies (manufacturers) Universities and other research institutions	A great number of foreigners will be visiting Japan for the 2020 Tokyo Olympic and Paralympic Games. We will promote various multilingual initiatives through public-private cooperation. Initiatives include: increasing multilingual signage, improving and implementing multilingual speech translation systems, introducing language support tools in hospitals, offering multilingual medical information services, deploying English-competent rescue teams and first-aid communication tools.
Implementing spatial information infrastructure, such as digital maps	MLIT* Tokyo Metropolitan Gov. (Bureau of Urban Development)	The aim is to create a stress-free society where anyone, including foreigners, can easily find their way around and also stay connected, anywhere, anytime. We will deploy high-accuracy positioning technologies using Quasi-Zenith Satellite System and indoor positioning systems to experimentally implement spatial information infrastructure, such as digital maps at airports, major railway stations, and stadiums around Tokyo.
Developing a community-based data sharing platform to improve services	METI* Research institutions, IT vendors Data provider: local governments Retailers, etc.	Utilizing service engineering to increase added value in the service sector. (Data utilization, sensor technology, customer relationship support technology, etc.)
Adopting systems for AI robots	Tokyo Metropolitan Gov.(Bureau of Industrial and Labor Affairs) Relevant government offices Universities and other research institutions Tokyo Metropolitan Industrial Technology Research Institute (TIRI)	We will promote R&D in robot technology in order to ensure use of robots at the Tokyo 2020 Olympic and Paralympic Games.

Initiatives	Cooperating Organizations
Regulatory and Systems Reform	
Handling of personal information (big data)	METI, etc.
Ensuring safety around robots	TIRI, etc.

Initiatives	Cooperating Organizations
System Design	
Verification and implementation procedures to bring different initiatives together into an integrated service.	Relevant ministries and government offices,Tokyo Metropolitan Gov., etc.

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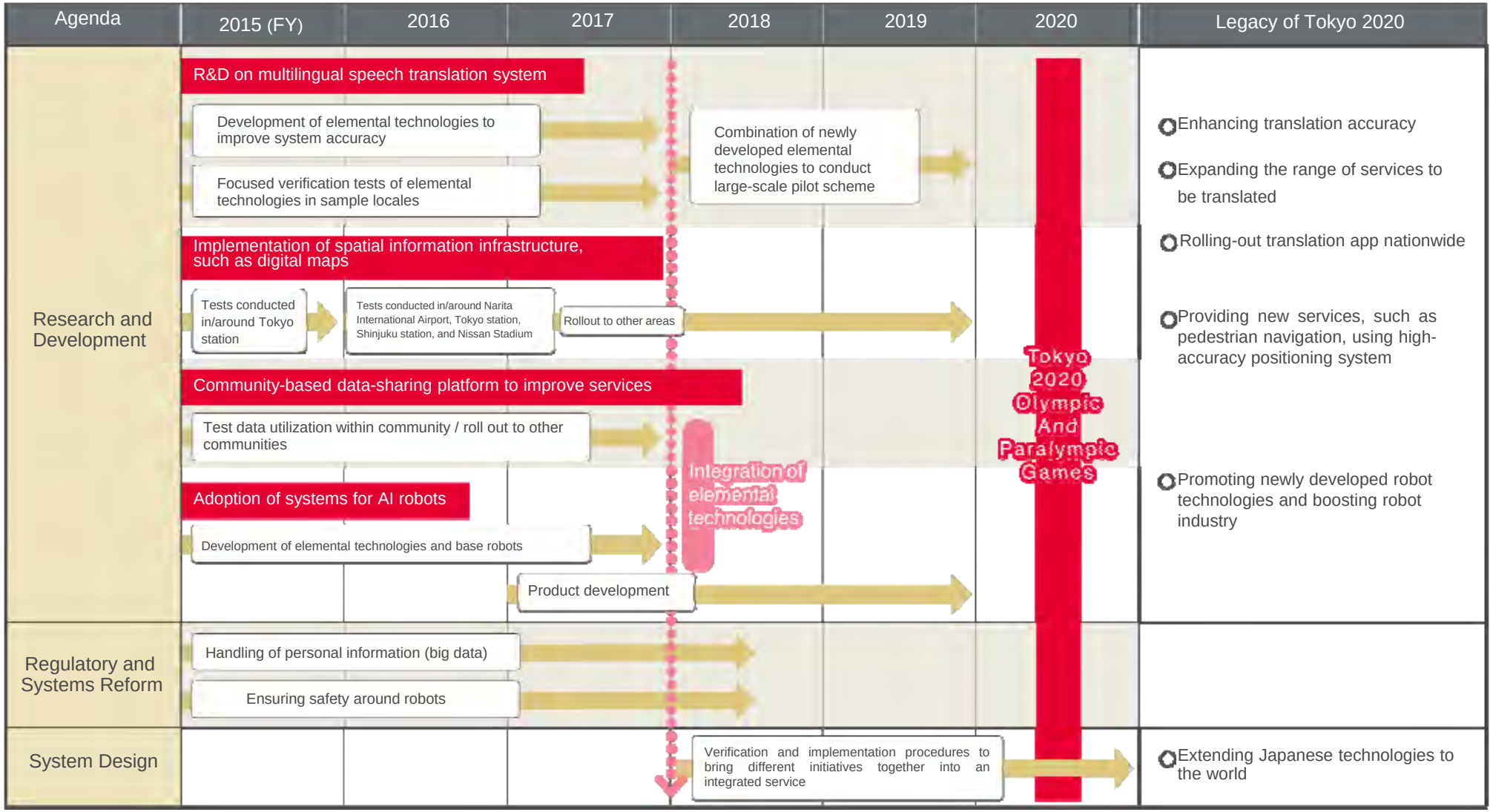
Timeline


Agenda
2015 (FY)
2016
2017
2018
2019
2020
Legacy of Tokyo 2020
Research and Development
R&D on multilingual speech translation system
Development of elemental technologies to improve system accuracy
Focused verification tests of elemental technologies in sample locales
Combination of newly developed elemental technologies to conduct large-scale pilot scheme
Implementation of spatial information infrastructure, such as digital maps
Tests conducted in/around Tokyo station
Tests conducted in/around Narita International Airport, Tokyo station, Shinjuku station, and Nissan Stadium
Rollout to other areas
Community-based data-sharing platform to improve services
Test data utilization within community / roll out to other communities
Integration of elemental technologies
Adoption of systems for AI robots
Development of elemental technologies and base robots
Product development
Tokyo 2020 Olympic And Paralympic Games
Enhancing translation accuracy
Expanding the range of services to be translated
Rolling-out translation app nationwide
Providing new services, such as pedestrian navigation, using high-accuracy positioning system
Promoting newly developed robot technologies and boosting robot industry
Regulatory and Systems Reform
Handling of personal information (big data)
Ensuring safety around robots
System Design
Verification and implementation procedures to bring different initiatives together into an integrated service
Extending Japanese technologies to the world