

New Challenges for Winter Road Service



冬道 Daily Bulletin

Winter Roads
FUYU MICHU

Association
mondiale
de la Route



World Road
Association



Switzerland's Former President Visits Japan's Minister of Land, Infrastructure and Transport

On January 25, Mr. Adolf Ogi, the former president of Switzerland, paid a courtesy call on Mrs. Chikage Oogi, Japan's Minister of Land, Infrastructure and Transport in Tokyo. Mr. Ogi is in Japan to attend the XIth PIARC International Winter Road Congress, 2002, Sapporo. Mrs. Oogi thanked him for speaking at the Congress.

First Overseas Arrivals in Sapporo: Early Birds Include Estonians

XIth PIARC International Winter Road Congress opens today at Sapporo Dome, draws 2,200 people from 62 countries



On January 27, the day before the PIARC Congress opened, visitors arrived at New Chitose Airport from Estonia, Latvia, Canada, the U.S.A., and elsewhere. Representatives from the Japanese Organizing Committee welcomed them at the airport, shaking hands with each attendee and talking enthusiastically about the conference. On the way to their hotels in Sapporo, the foreign delegates

were impressed with the city's heavy snowfall and showed great interest in the road conditions.

The XIth PIARC International Winter Road Congress is being held for the four days from January 28th at Sapporo Dome, which will be a venue for the 2002 FIFA World Cup. The PIARC Congress is seeing participation by 2,200 people from 62 nations.

Welcome to Sapporo!



Michio SUZUKI
President of the XIth PIARC International Winter Road Congress, 2002, Sapporo, Japan

In November 1997 at the Executive Committee meeting in Geneva, Sapporo was officially announced as the host of the 2002 PIARC International Winter Road Congress. Since then, we have been preparing for this Congress with the support and cooperation of many organizations, most notably the PIARC Headquarters and Japan's Ministry of Land, Infrastructure and Transport. Today would not have been possible without the generous efforts of these and other parties.

The final phase of Congress preparation is progressing as scheduled, to accommodate some 2,200 representatives from more than 60 countries, regions, and international organizations. These visitors include ministers of government agencies and the former president of Switzerland. Now the preparatory work has been completed for all the Congress sites, including the Session

Rooms and Exhibition Sites. I extend a warm welcome to all participants in this Congress, whose theme is "New Challenges for Winter Road Service."

During the exhibition, a highlight of the Congress, the exhibitors will make use of a vast 14,460-square-meter space. Although the exhibition focuses on snow and ice control, the exhibition topics will range from the environment to energy to ITS as these relate to roads. We hope the participants will take advantage of this opportunity to exchange information on innovative research and the latest technologies.

As the President I would like to say, on behalf of the parties involved in preparations and their many collaborators, that we will do our best during the Congress to make this event an informative one for all participants.

Sapporo Welcomes PIARC Attendees

The Largest City North of Tokyo, and Host of the 1972 Winter Olympic Games

Sapporo, with a population of 1.83 million, sees snowfall of over 5 m every year. Few of the world's cities of this size receive this much annual snowfall.

Since its beginnings 130 years ago, Sapporo has followed a Western model of urban development. Such city planning is rare in Japan, and its

success is evidenced by the fact that Sapporo has hosted various international events, including the 1972 Winter Olympic Games. As the XIth PIARC International Winter Road Congress opens, all of Sapporo hopes that this event will mark the beginning of a new era for Sapporo.



Sapporo, the host of the XIth PIARC International Winter Road Congress, 2002



1972 Winter Olympic Games



Sapporo Snow Festival



White Illumination



Downtown Sapporo (population: 1.83 million)

Yesterday's Shots



Group photo at the Indoor Exhibition Site



British attendees



American and Canadian attendees arrive at New Chitose Airport



Italian attendees ride the subway train soon after arrival



Hungarian attendees check in



American and Canadian attendees

Opening Ceremony

Date: January 28 (Mon), 5:00 – 9:00 p.m.

Site: The Special Stage in the Indoor Exhibition Site

Opening remarks: Mr. Michio Suzuki, President of the XIth PIARC International Winter Congress, 2002, Sapporo, Japan

Conference address: Mr. Olivier Michaud, President of PIARC

Address (tentative): Mrs. Chikage Oogi, Minister of Land, Infrastructure, and Transport of Japan

Address: Mr. Tatsuya Hori, Governor of Hokkaido

Address: Mr. Nobuo Katsura, Mayor of Sapporo

Overview of the Congress

Performances:

1. O-daiko ippon-uchi (traditional Hokkaido drumming, featuring a single stick)
2. Tsugaru shamisen (traditional string instrument from Aomori)
3. Esashi-oiwake (traditional local folk song from Hokkaido)
4. Yosakoi-soran (modernized version of a popular local folk song from Hokkaido)
5. Sakata-maiko (traditional dance by apprentice geishas from Yamagata)
6. Namahage (performance of a folk ritual from northern Japan)
7. Children's dance performance

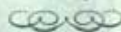
Ribbon cutting: Presided over by Mr. Michio Hirano, Director General of the Hokkaido Regional Development Bureau, Ministry of Land, Infrastructure and Transport, and President of the Local Executive Committee for the XIth PIARC International Winter Road Congress 2002

Introduction of Exhibition

Kagami-wari (Opening of the sake cask to usher in good luck for the Conference)

Social hours

Welcome Party Food Menu



Assorted cold cuts: Ham from Furano, Genovese sausage
basil-flavored sausage, sliced beef

Corn on the cob from Ishikari

Steamed potatoes from Makkari with butter

Rolled sushi and inari sushi (rice wrapped in fried tofu)

Smoked scallops from the Okhotsk and Coho salmon
from Hidaka with lemon

Hokkaido ice cream

Kita-no homare Saké, Nikka Whiskey, Sapporo Classic Beer,
Otaru Wine (red and white)



Attractions: "Japanese Festivals That Bring Color to Northern Land"

Traditional arts and festivals in Hokkaido and other Northern regions of Japan powerfully demonstrate the wisdom, energy, and warmth of people living with snow and cold.

Yosakoi Soran Festival

よさこいソーラン

The Yosakoi Soran Festival was launched by students in Hokkaido in 1992. One of those students was inspired to initiate this festival after he was moved by the annual Yosakoi Festival of Kochi Prefecture in southern Japan. In the Yosakoi Soran Festival, the traditional Yosakoi-bushi folk ballad of Kochi was arranged as a powerful, modern, rhythmic version that epitomizes the energy of youth. The student thought to combine the Yosakoi Festival of Kochi Prefecture with Hokkaido's traditional Soran-bushi folk ballad, thus realizing the Yosakoi Soran Festival.

In the coming summer, the tenth Yosakoi Soran Festival is expected to attract some two million spectators. It has grown to become a major event in Hokkaido, along with the Sapporo Snow Festival.

Namahage

なまはげ

The Namahage Festival has been held for more than 1,200 years on the Oga Peninsula of Akita Prefecture. On the 15th of the first lunar month or on New Year's Eve, men mask themselves as demons, dress in straw capes, and clutch hoes and wooden knives. They visit households in the area and after the "demons" worship at the family Shinto altar, they chase after children and roar in the local dialect: "Any kids here who cry? Any kids who are lazy?" Children cling to their parents or grandparents until the demons depart. The demons leave

after they are given sake, rice cake and other food.

"Namahage" means "the expulsion of laziness." This tradition helps the locals to get through the cold winter, when people tend to become lazy. In 1978 it achieved designation as an Important Intangible Folk Cultural Property of Japan.

Sakata Maiko

酒田舞妓

Sakata was a flourishing commercial port on the Japan Sea in what is now Yamagata Prefecture. The town gained a reputation as a northern center of maiko (apprentice geisha) during the Edo era (1603-1867). The maiko here performed elegant dances during business negotiations at ryotei (elegant traditional Japanese restaurants), until the tradition fell into decline after World War II.

A decade ago, an effort was made to restore maiko, based on the belief that maiko and ryotei are important elements of the local culture. Today, maiko perform at bars and restaurants in Sakata and at events of Yamagata Prefecture. The popularity of maiko is rising.

Tsugaru Shamisen

津軽三味線

The shamisen is a Japanese stringed instrument plucked by pick to powerful effect. Tsugaru shamisen, plucked in a uniquely percussive style, originated in Aomori Prefecture, which is close to Hokkaido. Legend holds that a blind man introduced the instrument long ago by playing hither and thither, after which the Tsugaru shamisen came to be used to ac-

company folk ballads. Many listeners were so impressed by its compelling musical introductions that it developed into a solo instrument. It was in 1956 that the Tsugaru shamisen gained the general attention of the public. Now fans dot the nation. Many shamisen players converge on Kanagi Town in Aomori Prefecture to participate in a national competition held every spring.

Esashi Oiwake

江差追分

The Esashi Oiwake folksong originated in the Oiwake-bushi ballad sung in central Japan. The song gradually headed north and reached Esashi, Hokkaido. Incorporated into other local songs, it became the Esashi Oiwake. It was sung on various occasions, including at work and during banquets, and many versions emerged. To unify the different variations, the Research Group for Authentic Esashi-Oiwake was founded in 1908. In 1935, the different variations were standardized as the present version.

The Austrian conductor Felix Weingartner introduced the Esashi Oiwake at the Vienna Theater, in a speech entitled "Japanese Music." As a result, the song moved musicians in many countries and gained attention as a folk ballad of the world. It later won recognition as a contemporary form of music. Offices of the Research Group for Authentic Esashi-Oiwake now number some 1,300, including the headquarters in Esashi, and membership exceeds 4,800 enthusiasts. In 1989, the first overseas branch was founded in San Paulo, Brazil.



Exhibition

"New Challenges for Winter Road Service"



"New Challenges for Winter Road Service" is the theme of the XIth International Winter Road Congress, the first such congress of the 21st century. A related exhibition and the Fuyutopia Fair are being held con-

currently at the Congress site.

The exhibition spotlights the products and activities of private companies and government agencies of fifteen countries including Japan. Exhibitors will be showcasing vari-

ous winter road technologies, including those for snow removal, snow melting, protection against snowstorms, traffic safety, the environment, and Intelligent Transport Systems. Indoor and outdoor sites feature more than 570 applications of snow- and ice-control technologies, including anti-freezing agents and GPS-based systems for managing snow removal machinery. Some exhibits will highlight information technologies including those related to Intelligent Transport Systems, for example ETC, VICS, AHS and GIS. Other displays will introduce regional and local development. Snow removal machinery will roar into action at the outdoor exhibition site.

The exhibition will be open to the public from 9:30 a.m. to 7 p.m. on January 29 and 30, and from 9:30 a.m. to 4 p.m. on the 31st. On the 28th, the first day of the Congress, the Exhibition Opening Ceremony and Welcoming Reception are scheduled for 6:30 p.m.

International



Machinery

Large construction machinery, snow removal equipment

Materials

Construction materials, snow-melting agents

Domestic Telecommunications and ITS
ITS-related technologies, such as ETC, VICS, and AHS, GPS, GIS, sensing technologies

Automotive

ITS-related technologies, environmental technologies

The Environment

Energy-saving technologies, energy generation technologies (natural and otherwise)

Construction

General construction technologies, pavement technology

Traffic Safety

Traffic safety support technologies

Regional

(Hokkaido, Tohoku, Hokuriku)

Regional industries, snow-melting technologies

A Look at Sapporo Dome, the Congress Site

What's Sapporo Dome?



Sapporo Dome measures 42,700 m², with an Indoor Arena accounting for 17,700 m² of this and an Outdoor Arena accounting for 25,000 m². The interior dome rises 68 m above the floor of the arena, and the facility is built of reinforced concrete. Its six floors include two basement

levels. In addition to seating 53,845 spectators, the Dome is equipped with special restrooms and seating reserved for people with handicaps.

The Dome employs various new technologies to address snow and the cold. The design aligns the roof axis with the prevailing wind direction to reduce snow accumulation, and the semi-basement structure decreases the heat load. Heating installed mainly in the seating areas provides a pleasant environment. The Dome can be used for various purposes, such as soccer and baseball. When the baseball field is set up, the pitcher's mound elevates automatically.

It is also an all-weather stadium: To enable the natural-turf soccer field (120 meters long x 85 meters wide x 1.38 meters thick) to slide between the indoor and outdoor arenas, air pressure is used to reduce the dead weight.

The observatory, the first of its kind for a stadium in Japan, provides sweeping vistas of

Sapporo and its environs as well as serving as a 53-meter-high vantage point for the Dome interior. Visitors to the observatory enjoy a three-minute trip through the air on a 60-meter-long, glass-enclosed escalator that offers a bird's-eye view of the stadium.

Visitors will find a commercial complex in the 150-meter-long glass shelter on the north side of the stadium. It houses a specialty shop featuring merchandise of Consadole Sapporo, a professional soccer team in the J1 division of the Japanese Soccer League, and that of Japanese professional baseball teams. Dining concessions include a restaurant that is popular for Hokkaido-grown food, a self-service cafeteria and cafés.

You are welcome to join the Dome tour in the Technical Visit. We invite you to take this opportunity to enjoy Sapporo Dome.

Sapporo, Where Disposed Snow Would Fill 11 Sapporo Domes a Year

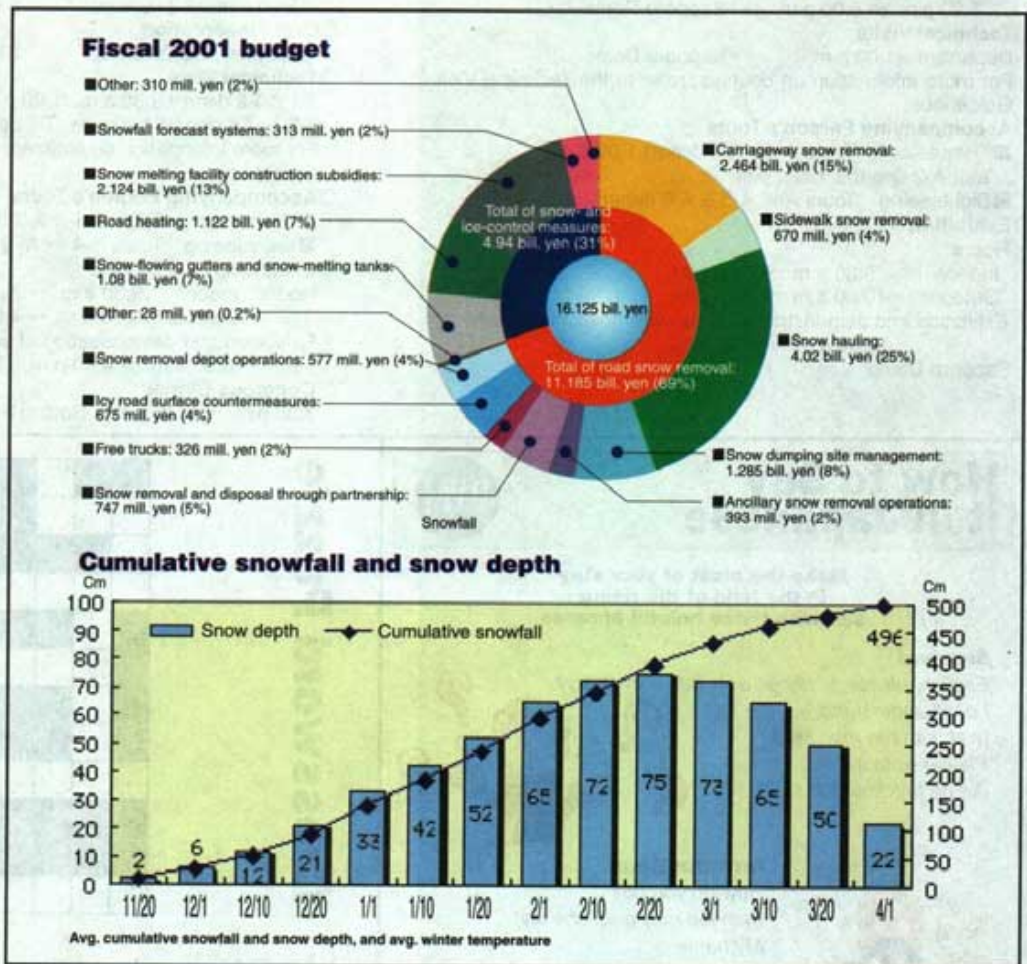
Snow- and Ice-Control Measures **VOL.1**

With five meters of snowfall every winter, Sapporo recognizes snow as a fact of winter life. The City is implementing snow- and ice-control measures based on various considerations. These measures are introduced in this four-part series.

Snow removal by the City of Sapporo has seen dramatic progress since the 11th Winter Olympic Games in 1972. The snow removal rate (length of snow removal / length of road administered by the City) has increased from 39% in 1970 to 93% in 1980 to 97% at present. Snow removal centers, which number 39 in the city, serve as bases for multi-zone snow removal on 5,050 km of road. Units of snow removal machinery number roughly 1,000, and these are operated by about 2,600 personnel.

Snow removal by hauling is performed once or twice each winter. Although last winter saw average snowfall, the snow disposal volume was 16 million cubic meters -- enough to fill 11 Sapporo Domes! The winter of 1995-1996 had the heaviest snowfall ever recorded by the Sapporo District Meteorological Observatory: 668 centimeters. That winter disposed snow amounted to 27 million cubic meters.

From this winter, 57 snow dumping sites have been made available. However, due to urbanization, it is more difficult every year to secure land for snow dumping. One answer to this problem is to enlist

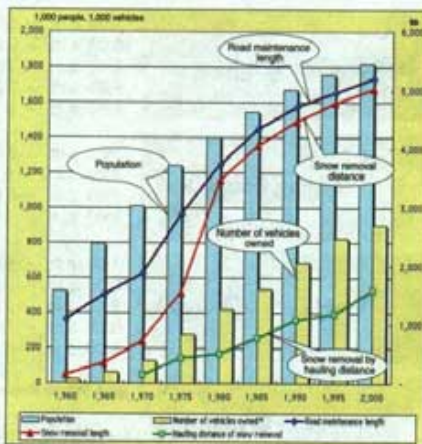


the vitality of the private sector for every aspect of snow disposal, from the securing of land to the handling of snowmelt water. For the winter of 2002, 17 such snow dumping sites have been made available, processing one-third of the snow destined for disposal.

Sapporo's snow- and ice-control budget amounts to 16.1 billion yen, which means 8,900 yen per resident, 20,600 yen per household, 3,208,000 yen per kilometer of road, and 32,510,000 yen per cm of snowfall.



Site layout: Snow dumping site



Figures Related to Snow- and Ice-Control Measures

Column

"Sasara" Streetcar: The Poetry of Winter in Sapporo

The City of Sapporo began mechanized snow removal in 1918. When streetcar service was launched, the sasara streetcar debuted. As shown in the photo, this streetcar used snow removal equipment fashioned of bamboo, installed at front and rear, to clear away snow. The sasara streetcar took its design from a bamboo kitchen



Snow removal by the "Sasara" Streetcar. Mounting of "sasara" brush.

scrubber (sasara) then in use. Materials with such resilience are still used to brush snow off the tracks.

Jan. 29 (Tue)

- Opening Session
9:30 a.m.~ 12:00 p.m. Sapporo Dome
- Oral Presentation
1:30 p.m. ~ 6:00 p.m. Sapporo Dome
- Technical Visits
Departure 1:00 p.m. Sapporo Dome
For more information on courses, refer to the Technical Visit Guidebook.
- Accompanying Person's Tours
■ "Hands-on" Tours A-1& A-3 depart 1:00 p.m.
Tour A-2 departs 12:30 p.m.
■ Sightseeing Tours A-4, A-5 & A-6 depart 9:00 a.m.
- Exhibition
Hours
Indoor 9:30 a.m. ~ 7:00 p.m.
Outdoor 10:00 a.m. ~ 4:00 p.m.
Exhibition and demonstration of snow-removal machinery
10:00 a.m. ~ 4:00 p.m.
Sapporo Dome

Jan. 30 (Wed)

- Special Session
9:00 a.m. ~ 12:00 p.m. Sapporo Dome
- Poster Session
12:00 p.m. ~ 2:00 p.m. Sapporo Dome
- Oral Presentation
2:00 p.m. ~ 5:20 p.m. Sapporo Dome
- Technical Vists
T-1 & T-2 depart 9:30 a.m. /1:00 p.m.
T-3 ~ T-6 depart 1:00 p.m. T-7 departs 1:00, 2:00, 3:00 & 4:00 p.m.
For more information on courses, refer to the Technical Visit Guidebook.
- Accompanying Person's Tours
■ "Hands-on" Tours A-1 & A-3 depart 1:00 p.m.; A-2, 12:30 p.m.
■ Sightseeing Tours A-4 ~ A-6 depart 9:00 a.m.
- Exhibition
Hours Indoor 9:30 a.m. ~ 7:00 p.m.
Outdoor 10:00 a.m. ~ 4:00 p.m.
Exhibition and demonstration of snow-removal machinery
10:00 a.m. ~ 4:00 p.m. Sapporo Dome
- Congress Dinner
7:30 p.m. ~ 9:30 p.m. Royton Sapporo

How to Say it in Japanese

DAY 1

Make the most of your stay in the land of the rising sun with these helpful phrases.

Survival

- "English, please." (ay go deh, hah nah shitay)
- "I don't understand." (wah kah ree mah sen)
- "Please write it down." (ka ee tay koo dah sigh)



Introductions

- "How do you do?" (hah jee may mah she tay)
- "My name is" (wah tah she wa dess)
- "Pleased to meet you." (yoh roh she koo oh nay gi she mass)



Greetings and Farewells

- "Good morning." (Oh-HI-o go-ZI-mass)
- "Hello." (during the day) (Koh NEE chee wa)
- "Good evening." (Kohn bahn wa)
- "Goodbye." (Sah yoh nah rah)
- "Good night." (Oh yah soo me nah sigh)



Crossword Puzzle



1. Future child?
2. Your Internet link
3. Major winter activity in Hokkaido
4. Try to stay ___ your feet this week!
5. Your livelihood
6. World famous Japanese
7. Naked with strangers in hot water
9. Traditional Japanese dress
10. Dome subway stop
12. C17 Chairman
14. Headgear
17. "Snow" in Japanese
4. Sake whiskey, sir?
6. UN adviser opens session
7. Sapporo's night world
8. Ski jump hill seen from downtown
11. Includes VICS and ETC
13. President Olivier
15. A fun place to lose yourself
16. Japanese minister in town on Monday.
17. "Grilled" in Japanese
18. A Globefish that can kill!
19. Sushi without the rice

Desk & Information Hours

Information Desk	10:00 a.m. - 9:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 7:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 7:00 p.m., 30 Jan. (Wed.) 8:00 a.m. - 5:00 p.m., 31 Jan. (Thu.)
Registration Desk (Congress Registration for Full-Registrants & Accompanying Persons)	1:00 p.m. - 5:00 p.m., 27 Jan. (Sun.) 10:00 a.m. - 9:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 7:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 7:00 p.m., 30 Jan. (Wed.) 8:00 a.m. - 5:00 p.m., 31 Jan. (Thu.)
Registration Desk (Registration for Accompanying Person's Tour)	1:00 p.m. - 5:00 p.m., 27 Jan. (Sun.) 10:00 a.m. - 9:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 7:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 1:00 p.m., 30 Jan. (Wed.)

Registration Desk for Technical Visits	1:00 p.m. - 5:00 p.m., 27 Jan. (Sun.) 10:00 a.m. - 9:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 7:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 7:00 p.m., 30 Jan. (Wed.) 8:00 a.m. - 9:20 a.m., 31 Jan. (Thu.)
Testing Room Desk	1:00 p.m. - 6:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 6:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 6:00 p.m., 30 Jan. (Wed.) 8:00 a.m. - 4:00 p.m., 31 Jan. (Thu.)
Travel Desk (JTB Corp.)	1:00 p.m. - 5:00 p.m., 27 Jan. (Sun.) 10:00 a.m. - 9:00 p.m., 28 Jan. (Mon.) 8:00 a.m. - 7:00 p.m., 29 Jan. (Tue.) 8:00 a.m. - 7:00 p.m., 30 Jan. (Wed.) 8:00 a.m. - 5:00 p.m., 31 Jan. (Thu.)
Restaurants	Sports Stadium Sapporo (1F) 11:00 a.m. - 7:00 p.m. Fan's Café (1F) 10:00 a.m. - 7:00 p.m. Bowbridge Café(3F) 10:00 a.m. - 6:00 p.m.