# Outline of the Population Estimates

#### I Outline

## 1 Coverage of the population estimates

The population estimates cover all the population, including foreigners, who usually live in Japan. However, of the foreigners, foreign diplomatic and consular corps, including their party or family members, and foreign military personnel, including their family members, are excluded.

#### 2 Method of the estimation

The population estimates are calculated using the recent census population(as of October 1) as the base by the following formula.

## [Basic formula]

Estimated population of the stated year=Estimated population of the previous year\*

+ Total net change during the year

Total net change = Natural change + Migration change

+ Net increase by change of nationality\*\*

Natural change = Live births - Deaths

Migration change = (Entries - Exits) + (Net inter-prefectural migrants)\*\*\*

Net inter-prefectural migrants = In-migrants - Out-migrants

Net increase by change of nationality = Acquisition of Japanese nationality - Loss of Japanese nationality

\* : The census population for the year when the population census was held.

\*\* : Only for the Japanese.

\*\*\* : Only for the population by prefectures.

# 3 Sources for the estimation

Live births and Deaths : "Vital Statistics (preliminary report)", Ministry of Health,

Labour and Welfare

Entries and Exits : "Statistics on Legal Migrants", Ministry of Justice

Net increase by change of nationality

: The Statistics Bureau, Ministry of Internal Affairs and

Communications tabulated the data of Ministry of Justice

Inter-prefectural migrants: "Monthly Report on Internal Migration in Japan Derived

from the Basic Resident Registration", Statistics Bureau,

Ministry of Internal Affairs and Communications

Others : "Population Census", Statistics Bureau, Ministry of Internal Affairs and

Communications

### **II** The estimation method

## 1 Elements of the population estimates

## a. Base population

The complete counts of Census population are used as the base population for the year following a Population Census, and for the year after the following year and thereafter, the final population estimates as of October 1 of the previous year is used as the base population.

- b. Total net change (= Natural change + Migration change + Net increase by change of nationality)
- (i) Natural change (= Live births Deaths)

For live births and deaths, the data of the Vital Statistics (preliminary results) (Ministry of Health, Labour and Welfare) is used.

Note that the number of deaths at unknown age and of unknown prefecture is divided according to the age-at-death distribution by prefecture of all those whose age at death and prefecture are identified and added to the corresponding age and prefecture data.

The number of deaths is tabulated by the age on October 1 of the previous year referring to the birth date and used for the estimates.

- (ii) Migration change (= Entry/exit balance of immigrants + Entry/exit balance of inter-prefecture migrants)
  - (1) Entry/exit balance of immigrants (=Entries Exits)

For entering/exiting immigrants, the data of the Statistics on Legal Migrants (Ministry of Justice) is used. Note that the numbers of Japanese whose period of stay in foreign countries is within 3 months (i.e., reentry within 3 months from the last departure) and foreigners whose period of stay in Japan is within 3 months are excluded.

The number of Japanese whose place of residence is in a foreign country is divided according to the distribution of the number of entering/exiting people by prefecture for each age and added to the number of the entering/exiting people of the corresponding prefecture.

The number of entering/exiting foreigners whose age and residence (prefecture) is not identified is divided according to the age and prefecture distribution of entering/exiting foreigners and added to the data of corresponding prefecture by age (single year).

As the data of Japanese is not tabulated by birth date, the data by age of the Statistics on Legal Migrants is used. Foreigners are tabulated by the age on October 1 of the previous year referring to their birth dates.

(2) Entry/exit balance of inter-prefecture migrants (= In-migrants – Out-migrants)

The data of inter-prefectural migrants of the Report of Internal Migration in Japan Derived from the Basic Resident Registration (Statistics Bureau, Ministry of Internal Affairs and Communications) is used.

(iii) Net increase by change of nationality (= Acquisition of Japanese nationality – Loss of Japanese nationality)

"The number of naturalized Japanese based on the data of the official gazette":

the data created by Ministry of Internal Affairs and Communications tabulating "the number of the people who acquired Japanese nationality," which was reported in the public notice through the official gazette "concerning the permission for naturalization," by age as of October 1 of the previous year referring to birth date, and the "numbers of the acquisition and loss of Japanese nationality" (Ministry of Justice) are used.

# 2 Estimates of the population of all of Japan and of each prefecture by age and sex

Japan's total population and Japanese population by prefecture, age (single year) and sex as of October 1 of the year are calculated by adding or subtracting the live births, deaths, entering/exiting immigrants, entry/exit balance of inter-prefecture migrants (and also the number of the people who acquired or lost Japanese nationality specifically for the Japanese population) in the previous one year period to or from the base population by age (single year) and sex.

These numbers are aggregated in each 5-year group to tabulate Japan's total population and Japanese population by prefecture, age (5-year group) and sex. Additionally, Japan's total population and Japanese population by age (single year) and sex for all Japan and Japan's total population and Japanese population by prefecture and sex are calculated.

