Appendix 1: Key Assumptions

“Basic (Reform and Development) Case

(1) Assumptions Related to the Macroeconomy

1) Population and Workforce
Population dynamics are obtained from the medium variant projection in the “Population Projections for Japan: 2001-2050” (as of January 2002) (National Institute of Population and Social Security Research). Although the labor force participation rate by age group and gender is constant for age groups below 60, it changes for those aged 60 and above depending on the ratios of nominal wages and pension benefits.

2) Improvement in Productivity
The growth rate of total factor productivity (hereafter referred to as “TFP”) in the five years from FY2005 is supposed to gradually increase up to the average rate of FY1990 onward (except for FY1997 and FY1998 during the period of financial instability). Moreover, due to acceleration of the structural reforms, 0.2% is added to the each year’s growth rate calculated above.

3) The World Economy, etc.
The growth rate of the world economy (consisting of 9 major destination countries for Japanese exports) and the inflation rate, which are based on the “World Economic Trends 2004 (Fall)” issued by the Cabinet Office, are assumed to be around 3.5 and 2.2 percent, respectively. As to crude oil price based on the IMF World Economic Outlook (2004 Fall), it will decrease by 2.8 percent annually in the period of FY2006-2009 and remain constant beyond 2009. The exchange rate is supposed to be constant in real terms.

4) The macroeconomic indicators in FY2004 and FY2005 are cited from the Economic Outlook for FY2005 and the Basic Stance on Economic and Fiscal Management (Cabinet Approval of December 20, 2004).

(2) Assumptions Related to Public Finance and Social Security

1) Social Security-Related Expenditures
(Pensions)
Based on the pension system revision in 2004. Contribution: In the case of the Employees’ Pension Plan, the contribution rate will be raised by 0.354 percent each year from October, 2004. Benefits: For new pensioners, sliding-scale wages method is applied and for current pensioners, CPI indexation is applied. In addition, both are adjusted with the macroeconomic sliding-scale.

State contribution ratio to the basic pension: The Ratio will be raised gradually to one-half of the total contribution by FY2009.

(Medical Care and Nursing Care)
Medical Care: The per capita medical service cost is estimated with taking into account of the population, income and price factors. Medical fees are raised at the rates of the increases in the consumer price index.

Nursing care: The nursing care cost is obtained according to the changes in population dynamics. In the “bill for revising part of the nursing-care insurance law” (tentative name), some of the benefits after October 2005 is reexamined.

2) Investment Expenditures
It is assumed that investment expenditures will be cut by 3% each year. As a result, fixed public capital formation will decline from 5.4 percent of nominal GDP in FY2003 to about 2.9 percent in FY2012.

3) Personnel Expenditures
The rate of increase is presumed to be capped at below 0.5 percent per year over the average personnel expenditures.

4) Other General Expenditures
Cost of supplies: A mechanical reduction of 1 percent from FY2006 onward is assumed. Other expenditures except for the above will increase at the same rate with the consumer prices index from FY2006 onward.

5) Taxation
Based on the FY2005 tax reform.
In addition, it is assumed that income tax for the two years from FY2006 (total 1.5 trillion yen) and consumption tax (total 1.5 trillion yen) for the remaining two years are raised, as to the sources of revenue for the increased state contribution to the basic pension.

6) Three-Part Reform Package
This is based on the agreement at the meeting of the government and ruling parties on Nov. 26, 2004, concerning the overall picture of "Three-Part Reform Package". The concrete reform programs included in the governmental budget draft and reflected in FY2005, and the remaining programs (excluding programs to be reviewed and concluded within 2005) are taken into account in FY2006.

The results of the projection in comparison to the previous one (submitted to the Council on Economic and Fiscal Policy on January 16, 2004) are as follows:
- Real growth rate: Apparent downward adjustment because of the shift to the chain index in GDP statistics.
- Nominal growth rate: Downward adjustment in line with the downward revision of the CPI in the first half of the simulation period.
- Primary balance: Upward revision in the first half of the simulation period due to the improvements in the projection of FY2004. Upward adjustment for the remaining period in accordance with the increasing nominal GDP growth rate.

"Non-Reform/Stagnant Case"
The differences with the "basic (reform and development) case" are as follows:

1) Assumptions Related to the Macroeconomy
- The growth rate of TFP is assumed to remain stagnant. No acceleration by the structural reforms is assumed.
- Long-term interest rates are assumed to go up significantly due to erosion of the credibility in the sustainability of public finance with the real interest rate in FY2010 reaching the levels of Italy in the early 1990s.

2) Assumptions Related to Public Finance and Social Security
- Personnel expenditures (civil officials) are assumed to change at the same rate of the average wage growth from FY2006 onward. Other expenditures including investment expenditures are considered to increase at the same rate of the CPI (except for the Social Security Related Expenditure, whose assumptions are the same as those in the "basic case").
Appendix 2

Comparison of the “Reference Projections” and the “Projection of the Budget's Effects on Outlays and Revenues through Later Years by the Ministry of Finance.

<table>
<thead>
<tr>
<th>Characteristics of Projection</th>
<th>Reference Projections</th>
<th>Projection of the Budget’s Effects on Outlays and Revenues through Later Years by the Ministry of Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Reference material submitted to the council on Economic and Fiscal Policy for “Structural Reform and Medium-term Economic and Fiscal Perspectives (Cabinet Decision).” (The reference projection is not included to it)</td>
<td>Reference material submitted to the Budget Committee (Cabinet reporting)</td>
</tr>
<tr>
<td>Method</td>
<td>Based on the econometric model with three sub-sectors i.e. Macroeconomy, Public Finance, Social Security.</td>
<td>Given the macroeconomic conditions exogenously, future figures for each item of the general account are calculated. (Repercussion from macroeconomy isn’t considered.)</td>
</tr>
<tr>
<td>Period</td>
<td>Five years (except for the primary balance, etc. shown until the early 2010s.)</td>
<td>Four years</td>
</tr>
<tr>
<td>Contents of Projection</td>
<td>(State of Macroeconomy) GDP growth rate, prices, unemployment rate, long-term interest rate, etc.</td>
<td>(State of Central government general account) Social security-related expenditure, public works-related expenditure, local allocation tax grants, expenditure for national debt service, tax revenues, government bond issues.</td>
</tr>
<tr>
<td></td>
<td>(State of Central and Local Government) Primary balance, public bond outstanding amounts, general government expenditures, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(State of Central Government General Account) Social security-related expenditures, public works-related expenditures, local allocation tax grants, expenditures for national debt service, tax revenues, government bond issues.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(State of local government Ordinary Account) General Expenditures, Local Tax, Local Allocation Tax Grants, National Treasury Disbursement, Local Government Bond issues, etc.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

Summary Tables and Figures of the Japan’s 21st Century Vision

This vision was made by a special study group and was submitted to the Council on Economic and Fiscal Policies in April 2005
## Main points of the “Japan’s 21st Century Vision”

<table>
<thead>
<tr>
<th>Item</th>
<th>[Japan’s Future]</th>
<th>[the economy in 2030]</th>
<th>Working Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>The real GDP growth rate around 1.5%.</td>
<td></td>
<td>Economy and Fiscal Perspectives Working Group</td>
</tr>
<tr>
<td>Per capita real GDP</td>
<td>Per capita real GDP growth at about 2%.</td>
<td></td>
<td>Economy and Fiscal Perspectives Working Group</td>
</tr>
<tr>
<td>The current account</td>
<td>The current account surplus diminishes gradually as a percentage of GDP, but not into a deficit. Although the balance of goods and services will turn into deficit, the surplus in the balance on income is expected to increase. (Foreign direct investment in China and other parts of East Asia will expand, and the profits received therefrom will increase.)</td>
<td></td>
<td>Economy and Fiscal Perspectives Working Group</td>
</tr>
<tr>
<td>Industry structure (GDP by industry)</td>
<td>The Asian manufacturing industries will increase at an annual rate of about 6.1%. Manufacturing production in the Japanese will increase at an annual rate of about 0.8% supported by increasing productivity at an annual rate of about 0.5%. The growth in non-manufacturing industries will be an annual 1.5%, surpassing that of the manufacturing, supported by an increase in income. The share of non-manufacturing industries will rise from 73% in 2000 to 69% in 2030, while that of manufacturing industries decreases from 24% in 2000 to 26%.</td>
<td></td>
<td>Competitive Power Working Group</td>
</tr>
<tr>
<td>Employment structure (based on labor income)</td>
<td>As the manufacturing industries become increasingly labor-saving, the employment share of non-manufacturing industries will rise from 80% in 2000 to 91%.</td>
<td></td>
<td>Competitive Power Working Group</td>
</tr>
<tr>
<td>Market for content</td>
<td>The market for content (animated cartoons, movies, music, games, media etc.) is expected to be 5% (current level in the United States) of the gross domestic product (GDP) in 2030 (about 6.7% growth a year).</td>
<td></td>
<td>Competitive Power Working Group</td>
</tr>
<tr>
<td>Travelers from foreign countries</td>
<td>The number of travelers visiting Japan may increase to 4.0 million in 2030 from 6.14 million in 2004. (3.98 million people visited Italy in 2002.)</td>
<td></td>
<td>Globalization Working Group</td>
</tr>
<tr>
<td>Healthy life of 80 years</td>
<td>People will have 80 years health-expectancy. (75 years in 2002 (the simple average of men and women))</td>
<td></td>
<td>Life and Region Working Group</td>
</tr>
</tbody>
</table>

Note: This table is for explanatory purposes. For citation or other use, please go directly to the text of “Japan’s 21st Century Vision” and the Reports of working groups.
Real economic growth

The real GDP growth rate at about 1.5%, and per capita real GDP grows at about 2%.

(※) Per capita real GDP growth rate = Real GDP growth rate - Population growth rate
Labor productivity

Capital deepening and a recovery in TFP will push labor productivity over 2%

(Note) Labour productivity growth = TFP growth + \text{capital share} \times \text{growth in capital/labor ratio}

contribution of capital deepening

contribution of TFP

labor productivity
**Age composition of population and labor force**

*Increased participation by the elderly*

**Participation rate at**
- 2005: 23%
- 2030: 32%

(Note) Participation ratio = labor force (workers + unemployed) / population
Current account: surplus through investment income

Although the balance of goods and services will move into deficit, the surplus in the investment of income will increase, resulting in the overall surplus.

( % of nominal GDP )
Social Security Expenditure and its Financing under the Current System (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>FY2005</th>
<th>FY2010</th>
<th>FY2015</th>
<th>FY2020</th>
<th>FY2025</th>
<th>FY2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security Expenditure</td>
<td>15.4</td>
<td>16.0</td>
<td>17.2</td>
<td>18.4</td>
<td>19.3</td>
<td>20.5</td>
</tr>
<tr>
<td>pension</td>
<td>8.2</td>
<td>8.1</td>
<td>7.9</td>
<td>7.6</td>
<td>7.4</td>
<td>7.4</td>
</tr>
<tr>
<td>medical and long-term care</td>
<td>6.4</td>
<td>7.1</td>
<td>8.5</td>
<td>10.0</td>
<td>11.3</td>
<td>12.6</td>
</tr>
<tr>
<td>other</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Social Security Financing</td>
<td>14.3</td>
<td>15.1</td>
<td>16.7</td>
<td>18.6</td>
<td>20.1</td>
<td>21.5</td>
</tr>
<tr>
<td>insurance fee</td>
<td>9.9</td>
<td>10.0</td>
<td>11.1</td>
<td>12.3</td>
<td>13.2</td>
<td>14.0</td>
</tr>
<tr>
<td>public subsidy</td>
<td>4.4</td>
<td>5.1</td>
<td>5.7</td>
<td>6.3</td>
<td>6.9</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Note SNA base and does not include welfare relief or military pension.