Japanese Space Policy
-The Basic Plan for Space Policy-

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Based on the Basic Space law

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- **The Vision**: *released in Dec. 2008*
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The Outline of Basic Plan

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- 6 Basic Pillars of the Utilization and R&D of Space

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The Government Should Take Comprehensively and Systematically measures of Space

- 9 Satellite Systems and Programs
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I. Status of Basic Plan for Space Policy

This Basic Plan is to solve problems we have on the utilization and R&D of space, such as

- ***Lack of comprehensive strategy as a whole nation***
- ***Shortage of experience of the utilization of space***
- ***Lack of competitiveness of industry***

This Plan is based on article 24 of the Basic Space Law, and ***Five years Program, foreseeing the next ten years****, to promote measures that the Government should take* ***comprehensively and systematically*** *with regard to the utilization and R&D of Space*

II. Basic Policy to Promote the utilization and R&D of Space

- Enhance R&D capability, Shift the Policy Priority to ***"Enhancing the Utilization of Space"***
- Promote the Governmental Space Programs ***effectively under the Strategic Headquarters' leadership***
- Goals are ***"Contribution to the international community"*** and ***"Better Quality of Life"***, applying our superior technology and talented people as much as possible

  Utilization and R&D of Space
  - for ***the rich, secure and safe life*** of our nations
  - for ***contributing to the international community*** with regard to global problems

II. Basic Policy to Promote the utilization and R&D of Space

<Six Basic Pillars of the Utilization and R&D of Space>

1: For a Rich, Secure and Safe Life

- Promote utilization and R&D of Space to deal with various needs of our society, such as ;
  - Public Safety, Preservation and Care of the territorial land,
  - Smooth Supply of Food, National Resources and Energy
  - Resolution of global problems (realizing a low carbon society)
  - better quality of life (high spec. positioning system, etc.)
  - continuous growth of industry and creation of employment

2: Security through the Utilization of Space

- Security through the utilization of Space, while maintaining our exclusively defense-oriented policy

II. Basic Policy to Promote the utilization and R&D of Space

<Six Basic Pillars of the Utilization and R&D of Space>

3: Promote the Utilization of Space for Diplomatic Policy

- "Utilization of Space for Diplomatic Policy"
  - Apply our space technology for protecting human beings from the threat of disaster, climate change, and others
  - Contribute to Global Environmental Issues through GEO, etc

- "Diplomatic Policy to promote the Utilization of Space"
  - Make diplomatic efforts for establishing the appropriate rules in space activities, in accordance with space related Treaties
  - Strengthen human development playing an active part in space-related international fora.

II. Basic Policy to Promote the utilization and R&D of Space

<Six Basic Pillars of the Utilization and R&D of Space>

4: Promotion of leading-edge R&D

- Breakthrough for new technology and creation of an energetic future by leading-edge R&D such as
  - space science and manned space activity that expand the area where human beings can exist
  - space photovoltaic which contributes to resolving the global environmental and energy problems

- Utilizing proactively international cooperation

II. Basic Policy to Promote the utilization and R&D of Space

<Six Basic Pillars of the Utilization and R&D of Space>

5: Foster Strategic Industries for the 21st Century

- The space industry is :
  - an important base that supports Space Activity of our country
  - so wide that it includes the utilization industry, and has a ripple effect to other industries
- Foster the Space Industry as a strategic one for the 21st century, and strengthen international competitiveness

6: Consider the Environment

- Promote the utilization and R&D of space, considering the effect on the environment
- Take the lead on environmental safeguards of space cooperating with the international society

III. Measures

The Government should promote comprehensively and systematically the following 9 Satellite Systems and Programs (5 Satellite Systems and 4 Programs) under the 6 pillars

< 5 Satellite Systems and 4 Programs>

A: Land and Ocean Observing Satellite System to contribute to Asia and other regions

--- Achieving Public Safety, Preservation and Care of territorial land, etc

B: Global Environmental Change and Climate Observing Satellite System

--- More precise climate forecast, Smooth Supply of Food, etc

C: Advanced telecommunication Satellite System

--- Secure the means of communication in the event of disaster

D: Positioning Satellite System

E: Satellite System for National Security

III. Measures

< 5 Satellite Systems and 4 Programs>

F: Space Science Program

--- Create the world-leading scientific results which lead the world effort

G: Manned Space Activity Program

--- Achieve a healthy long life society, Create the world-leading scientific results, Expand the area where human beings can exist

H: R&D of Space Photovoltaics Program

--- Achieve new energy that supports a low carbon society

I : Small Size Certification Satellites Program

--- New industry, expansion of the space industry and creation of employment

III. Measures

< Promotion of Specific Measures for Each Area >

1: For a Rich, Secure and Safe Life

System A, B, C, D

- Establish a Satellite Data Utilization System
  - Increasing user-friendliness of the data for both specialists and for ordinary citizens
  - Establish Data Archive and Contribution System, so that the user can access several satellite data at once, which is called "One Stop Service"
  - Establish the data policy, including the policy of charge, etc

2: Security through the Utilization of Space

System E

- Promoting the discussion on how to apply the space technology in the field of the security arrangement compatible with Japan's exclusively defense-oriented policy

III. Measures

< Promotion of Specific Measures for Each Area >

3: "Utilization of Space for Diplomatic Policy" and "Diplomatic Policy to promote the Utilization of Space"

All Systems & Programs

- Contribution for the Asia Pacific and other regions
  - Enhance cooperation under the "Asia-Pacific Regional Space Agency Forum (APRSAF)"
    (in adequate cases, by using official development assistance)
  - Contribute additionally to the Middle East, Africa, Central and South America
- Contribution for global problems
  - Contributing to the exploration of policy options for the prevention of global warming by "IBUKI", etc
- Enhancing bilateral relations

III. Measures

< Promotion of Specific Measures for Each Area >

4: Promotion of leading-edge R&D

Program F, G, H

- Promote space science, challenging scientific discovery
- Promote manned space activity
  - Decide comprehensively whether to prolong the operation of the International Space Station to after 2016
  - Improve the capability to realize manned space activity
  - Set it an important target to probe the moon
  - Consider about the probe of the moon within a year, aiming to probe the moon by a two-legged robot by around 2020
- Promoting R&D of the forefront area to contribute to environmental and energy measures (Space Photovoltaics, etc)

III. Measures

< Promotion of Specific Measures for Each Area >

5: Foster the Space Industry as a Strategic one

All Systems & Programs

- Strengthen international competitiveness
- Promote constructing a space transportation system and the maintenance of launch shooting ranges, etc
- Promote industrial activity by utilizing the capability of medium and small-sized enterprise, venture companies, and universities

6: Environmental Safeguards

All Systems & Programs

- Consider the influence to the ground environment and promote Spin-off of technology related to space to environmental areas
- Safeguards of Space Environment
  - Promote observation of orbital objects to identify the debris population better, mitigation of debris, and coordination to remove them, and participate proactively in making an international frame

III. Measures

< Promotion of Specific Measures for Each Area >

7: Invest in the next generation; facilitate the participation of people

All Systems & Programs

- Foster engineers and researchers contributing to the next generation
  - Strengthen space education and research at the universities, etc.
  - Foster practical engineers and researchers through cooperation between the space agency and universities

- Promote the education of children, public relations
  - Expand the chance of real or virtual experiences

- Promote measures in which the people participate
  - Contests in which the people participate
  - Make efforts to request people's wisdom about the space policy, etc

IV. Promote Measures under the Basic Plan for Space Policy

(1) Structure to promote measures based on the Basic Plan

(2) Ensuring the necessary budget and personnel for the execution of the measures

(3) Follow-up and announcement of how far the measures are executed

(4) Strengthening the investigation and analysis function of international trends

(5) Establishment of legislation concerning Space Activity

(6) Ensuring the cooperation and correspondence with policies other than space

Thank you
for your attention!