Country Report from Japan

Launched QZS-1 of Japan’s QZSS

- 1st step for “Geo-Intelligence” Infra-

The 50th CGSIC, 20 Sept, 2010
at Portland, Oregon

Hiroshi Nishiguchi
Japan GPS Council
QZS-1 was launched on 11 September successfully.
I. System Description

Space Segment - QZS-1 -

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| Mass | Approx. 1,800kg (dry)  
(NAV Payload: Approx. 320kg) |
| Power | Approx. 5.3 kW (EOL)  
(NAV Payload: Approx. 1.9kW) |
| Design Life | 10 years |

Satellite Configuration on Orbit
## I. System Description

### Planned Signals

<table>
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<tr>
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<th>Frequency</th>
<th>Notes</th>
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<tbody>
<tr>
<td>L1-C/A</td>
<td>1575.42MHz</td>
<td>• Complete compatibility and interoperability with existing and future modernized GPS signals</td>
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<tr>
<td>L1C</td>
<td></td>
<td>• Differential Correction data, Integrity flag, Ionospheric correction</td>
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<tr>
<td>L2C</td>
<td>1227.6MHz</td>
<td>• Almanac &amp; Health for other GNSS SVs</td>
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<tr>
<td>L5</td>
<td>1176.45MHz</td>
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<tr>
<td>L1-SAIF*</td>
<td>1575.42MHz</td>
<td>• Compatibility with GPS-SBAS</td>
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<tr>
<td>LEX</td>
<td>1278.75MHz</td>
<td>• Experimental Signal with higher data rate message (2Kbps)</td>
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<td>• Compatibility &amp; interoperability with Galileo E6 signal</td>
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* L1-SAIF: L1-Submeter-class Augmentation with Integrity Function
IOV and Utilization Demo

(1) ~the end of 2010 : In-Orbit-Validation

(2) ~ Summer of 2011 : Utilization Demonstration

101 of companies will participate and 58 of demo programs will be implemented.
Next Step for QZS-2 & -3

(1) Establishment of The Joint Project Team and WG
   For securing budget
   Who is to be in charge of managing and operation

(2) The project team is composed of the parliament Officials
   Integrated coordination among main 9 Ministries
The number of navigation system units in market (JEITA)

Over 41.2 million units of car navigation systems have been sold!
VICSユニットの出荷台数累計

The number of VICS units in market (VICS Center)

2010年6月末現在、VICSユニットの出荷台数は2764万台を突破！
The number of VICS on-board devices sold in Japan has reached 27.6 million units!

(財)道路交通情報通信システムセンター（VICSセンター）データより国土交通省作成（2010.8.3）