

# ***Asia Pacific Economic Cooperation Promoting GNSS Applications***



***Briefing to the International  
Committee on GNSS***



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*December 10, 2008*



## *APEC Members*



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APEC has 21 members referred to as **Member Economies**.

The term Member Economies is used because the APEC cooperative process is predominantly concerned with trade and economic issues, with members engaging with one another as economic entities.



# *APEC Members*



**Australia**  
**Brunei Darussalam**  
**Canada**  
**Chile**  
**People's Republic of China**  
**Hong Kong, China**

**Indonesia**  
**Japan**  
**Republic of Korea**  
**Malaysia**  
**Mexico**  
**New Zealand**

**Papua New Guinea**  
**Peru**  
**Republic of the Philippines**  
**The Russian Federation**  
**Singapore**  
**Chinese Taipei**

**Thailand**  
**United States**  
**Viet Nam**



# *APEC Statements Related to Transportation and GNSS*



## 20<sup>th</sup> APEC Ministerial Statement

- “...recognized the importance of improved mobility and economic prosperity through more secure and efficient transportation systems”

## 5<sup>th</sup> APEC Transportation Ministerial Statement

- “...encourage[d] member economies to continue reduction of business transaction costs through greater transport efficiency.”

## U.S. Delegation to Senior Officials meeting 2008 noted that:

- “application of Space Technology, such as Global Navigation Satellite Systems (GNSS), could help improve energy efficiency...”



## *2008 Priorities of APEC Transportation Ministers*



- Recognize transport as a key enabler of trade and greater regional economic integration;
- Ensure that our transportation processes and regulatory frameworks evolve in a way which does not impede economic efficiency and growth;
- Respond to new and emerging transport security, safety and environmental challenges;
- Address the need for appropriately skilled and trained people to support transport growth and development;



## *2008 Priorities (Cont.)*



- Take concerted action to address transport security across all transport modes by recognizing the vulnerabilities of our increasingly networked transportation system
- Identify opportunities to collaborate widely with other relevant international organizations
- Increase the priority placed on road safety



# *APEC GNSS Implementation Team (GIT)*



- Goal is to promote implementation of regional GNSS augmentation systems to enhance inter-modal transportation and recommend actions to be considered in the Asia Pacific Region
- Reports to the Transportation Working Group through the Intermodal Experts Group



## *APEC GNSS Innovation Summit and GIT/12 Meeting*



- Thailand with the support of AEROTHAI hosted a GNSS Technological Innovation Summit in May 2008
- Completed the successful \$1 million GNSS test bed project, located in Bangkok and funded by the TDA and supported by the FAA
- Updated the Terms of Reference to take account environmental benefits
- Achieved consensus on a project proposal to survey and assess current applications for surface transportation utilizing GNSS
- Adopted a Program of Action



# Areas for Cooperation



Inter-Modal  
Applications

Maritime Safety

Aviation

Road Safety and  
Transit





## *APEC Transportation (TPT) Outcome*



- The GNSS Implementation Team reported to the Intermodal Experts Group (IEG) in August 2008
- The IEG was impressed with the GNSS Technological Innovation Summit and the GIT/12 Outcomes and forwarded project proposal to APEC
- GIT contributed to the deliberations in all four working groups (Intermodal, Maritime Safety, Maritime Experts and Aviation)
- Interest expressed in learning more about GNSS in the Plenary and in the maritime safety group at the next APEC Transportation Working Group



# Challenges



- Need for greater involvement of agencies and industry in APEC deliberations concerning GNSS technologies and implementation
- Need to identify areas where project proposals could enhance the drive for greater GNSS interoperability and compatibility
- Looking for ideas for areas of cooperation in all transportation modes to achieve seamless transportation systems
- Seeking opportunities to use GNSS technology to increase energy efficiency, reduce congestion and enhance infrastructure



## *Summary*



- The APEC forum provides an excellent opportunity to interact with Asia Pacific economies on GNSS
- U.S. is actively engaged on space-based navigation applications in all modes of transportation
- U.S. is seeking opportunities to promote GNSS technology to increase energy efficiency, reduce congestion and improve infrastructure development in the Asia Pacific region