## **Commentary on Northeast Asian Transportation Systems**

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In his paper "Toward Efficient and Sustainable Development of Transportation Systems in Northeast Asia," Il-Soo Jun has solid insight into the ongoing issue of the development of efficient and integrated transportation systems in Northeast Asia. I completely agree with his assessment that an efficient regional transport system plays a crucial role in the economic and social development of the region, and also plays a critical role in regional cooperation and integration. I would like to add my own contributions to the excellent groundwork that Il-Soo Jun has laid with this paper.

Northeast Asia can indeed learn from the models of the European Union and NAFTA, as Il-Soo Jun points out, but it must be careful to do so only while keeping the very unique and different context of Northeast Asia in mind. Northeast Asia is a region of varying economic, political, and social systems at play, and the concepts of integration and even unification are, relatively speaking, new to a regional dynamic that includes China, Japan, Taiwan, and North Korea. As a result, the thirty-odd years of European Community – European Union integration evolution may have only limited application to the development of Northeast Asian transportation cooperation and integration. For example, policies in Europe have been drafted under the assumption that all policies will, upon their eventual integration under the EU Parliament, be regulated within a unified system for the nations involved.

Northeast Asia has no regional consensus for eventual complete integration in the same manner as Europe. Therefore, an incremental approach, closer to the NAFTA model, designed to enhance efficiency rather than integration, and one that allows market forces to play a greater role in the transportation network development, may produce incremental gains for Northeast Asia that it can build upon, over time.

Another element I would add to Il-Soo Jun's contribution is a perspective on new transportation technologies. As old transportation infrastructure is renovated, and new infrastructure is added throughout the region, planners in both the public and private sectors must create an environment that plans for and encourages the introduction of increasingly efficient new technologies into the transportation sector. Two very prominent examples of high-impact technologies are high-speed ferries and tilt-rotor transports, which both have the potential to significantly reduce infrastructure requirements, reduce the environmental impact in terms of

land use and pollution effects, and increase the flexibility that transportation planners have for hub and satellite sites.

Ferry technology has the potential to relieve congestion at overcrowded airports. Studies in the United States show that ferries can replace shorter-range commuter flights between coastal cities and reduce such airport traffic by up to 20%. Further, innovative ferry designs with growing cargo capacity can play a role in cargo transport service between the maritime hub cities and the "second-tier" cities that Il-Soo Jun refers to. Alternative-fueled ferry transports can also play a role in the increasingly urgent requirement for reductions in transportation sector emissions, as regional governments become aware of the need for long-term environmental planning.

Similarly, tilt-rotor craft can augment the use of ferries in coastal areas. In landlocked regions, they have the advantage of requiring less infrastructure development and land area than other types of transportation systems.

While high-speed and clean-fueled ferry and tilt-rotor transport technology development is under way, technologies with the potential for dramatic impact such as these must be planned for. When the private sector might be the operators of such systems, the use of such technologies must be encouraged through the use of tax breaks and other incentives, until such time as the systems become cheaper through economies of scale.

Finally, I am encouraged by Il-Soo Jun's advocacy of increasing the role of the private sector in the development of a regional transportation network, including the use of "public-private" partnerships, and the need to create favorable regulatory environments to attract private capital. In the United States, several port facilities owned by local governments are reworking their operations plans to closely resemble corporate models, and giving private businesses increasing controls over port operations to introduce efficiencies. This increasing involvement of the private sector element is absolutely necessary across the range of transportation infrastructure operations, and as the private sector and industry become more involved in operations, the more willing they will be to fund infrastructure modernization and expansion. The sheer size of infrastructure investment required to repair and maintain existing facilities, as well as the additional investment required to expand and link current networks, will require unique and innovative approaches to attracting private financing.