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# International Loran Association

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G. Linn Roth, Ph.D.  
President, International Loran Association**

President Smith and colleagues, it is my great pleasure to welcome all participants on behalf of the ILA and to extend our warmest thanks to the RIN for co-hosting this important meeting. It is a delight to gather in such an historic setting and to participate in an international symposium where technical and policy issues can be reviewed from a variety of perspectives.

My reference to this symposium as an "important meeting" was not a gratuitous compliment to the organizers and attendees, as is so commonly done in opening addresses. I believe this conference is important because it is the first contemporary conference, at least to my knowledge, that specifically focuses on the complementary nature of dissimilar systems, and explicitly recognizes the advantages and the necessity of such combined approaches.

Originally, navigation technologies typically evolved to meet the needs of individual user groups, such as the marine community. In contrast, today's radionavigation systems can no longer be viewed as single modality technologies, and their uses permeate the deepest infrastructure of every modern nation. For example, radionavigation systems now synchronize massive telecommunication networks affecting tens of millions of individuals in many nations, and dependencies on these core timing resources will become increasingly widespread and critical.

Consequently, each nation *cannot* select a complete system based on the needs of one or two user populations, such as marine or aviation groups. Instead, each nation must consider all its multimodal needs, and wisely establish policies and choose systems that cost effectively provide the level of safety and performance required to meet individual national interests.

At this meeting at least 15 nations are represented, a tacit expression that the participating countries recognize this issue and recognize the need to address how satellite, terrestrial and other technologies can be combined to form the best possible national systems. As a result, I am particularly optimistic about the future of combined systems, and the role Loran can play in such integrated approaches.

Loran – like satellite systems – is a multimodal resource and its performance potential is relatively untapped. After a prolonged malaise primarily due to policy problems within the US government, the future of Loran looks very bright indeed. New technologies such as Eurofix will unquestionably lead to integrated satellite/Loran systems with performance well beyond what either technology can provide alone. Moreover, that new level of performance will be applicable to virtually all areas critical to national infrastructures.

Most would agree the safest, most reliable systems are derived by combining dissimilar technologies. Now such combined systems represent the *future* of radionavigation for positioning, navigation, and timing in all countries. We are here to discuss how to optimize that future for all nations, and the ILA welcomes the opportunity to do so with you. Thank you.