

In 25 years since winning a contract with Boston’s MBTA in 1983, Kinki Sharyo has explored the LRV market of the U.S. by delivering nearly 500 units of LRV (Light Rail Vehicle) to Dallas, New Jersey, Santa Clara, Seattle and Phoenix, which are among major urban areas in the country. Especially, we lead the American market for 70% low-floor LRVs, our mainstay, while competing fiercely with European manufacturers.

In future, demand for LRVs will grow in the U.S. due to the recent steep rise of gasoline price, chronic traffic congestion in urban areas, and air pollution and other environmental problems.

This article briefly presents aspects of the U.S. as a “contract society,” from the perspective of vehicle projects.

Customer and Consultant

In our U.S. project, Kinkisharyo International L.L.C., an affiliate of Kinkisharyo (USA), acts as the main candidate contractor to win a contract for several tens of LRVs from the transportation bureau of a major city through fierce competition with other manufacturers. The “Buy American” Act is applied to many projects; this act demands that U.S.-made products should account for at least 60% of the amount of a contract, and that final assembly should be conducted at a local site.

Organizations that represent our customers are in areas scattered over the vast territory of the U.S., with widely different topographies, weather conditions and climates. Customer requirements reflect the characteristics of a particular area. For example, a customer in a hot area would demand that a cooling standby operation mode should be provided to vehicles to be left in a standstill or wait for some time.

Every customer entrusts an external consultant business with such tasks as the preparation of specifications, technical proposals and design drawings; the evaluation of papers; and the witnessing of tests and inspections. In case of a project involving the construction of new line(s), there is a need to construct large facilities, and provide various interfaces with infrastructure to that end. Therefore, all project-related business concerning e.g. vehicles, facilities, equipment and operation plan is consigned to a consultant.

At the design stage, a consultant conducts substantial business related to approval for authorities. A consultant has much extensive discretionary power: in one case, it helped reverse a temporary decision to adopt a main equipment manufacturer recommended by us. Also, a consultant often makes various decisions as representative of

authorities even after product assurance. Therefore, a key to ensuring the success of a project is how to deal with a consultant.

Circumstances in the U.S. are widely different from those in Japan in that there is much liquidity concerning the movement of human resources among authorities, consultants and manufacturers. This factor, along with work procedures based on the networking of business with a certain individual at its hub, contributes to the sharing of various information by many people. This means that a manufacturer must be careful about its handling of information.

Specifications

A vast volume of request specifications issued by authorities is one of the most perceptible aspects of the U.S. as a “contract society.” These specifications are prepared by a consultant for authorities, with technical specifications including such contents as basic vehicle specifications, body construction, vehicle performance, details of each equipment, operating environment, materials used, testing and inspection, and product assurance.

Specifications define service proven requirements, which demand that a vehicle of the same type as a proposed vehicle, along with mounted equipment, should have met specified conditions (e.g. availability, MTBF/MDBF) in a certain period of operation. Regarding these requirements, Kinki Sharyo, with a solid “service proven” record, has an advantage over others. At the early stage of a project, we discuss the validity and feasibility of requirements with authorities regarding technology, delivery schedule and costs, based on our past record. The aim of this discussion is to modify these requirements to ensure that they can be met in an actual situation.

If we judged that some request specifications need not necessarily be met in view of our “service proven” record, we submit waiver request(s) concerning relevant items in the specifications. If some request specifications can be met through means other than specified ones, we may initiate procedures for specification change.

If authorities judged that such a request for specification change means a generally lower quality than a requested one, they may request us to compensate for such concession in some form. In such a case, we discuss with authorities to find a compromise solution, based on a comprehensive and realistic point of view comprising the entire project.

Contract Society

After the delivery of our vehicles, we observe a product assurance period specified for each vehicle equipment or area. Also, authorities begin their maintenance procedures according to a maintenance manual submitted by us.

Regarding electronic equipment that may pose difficult maintenance problems over time, specifications require the submission of detailed materials on circuit boards, source codes for software etc. A manufacturer that cannot fulfill this requirement must conclude an escrow contract with authorities, according to which the manufacturer entrusts a third party (an intellectual property management firm etc.) with the management of relevant information. During the term of the contract, the manufacturer must perform product assurance for authorities, while the authorities may not freely disclose product information. However, if the manufacturer does not or cannot perform product assurance, the authorities may disclose the information. During the term, the manufacturer must bear all costs of management by the third party.

I think that this kind of contract has good points as well as bad points. However, it is an approach typical of America, a country where lawsuits and lawyers abound.

In this article, I presented some aspects of our U.S. projects, focusing on customers and specifications.

In my view, however, what a customer essentially expects from us is nothing other than delivering high-performance vehicles according to schedule. In other words, they want to see our high practical abilities in design, purchase, manufacture, inspection and quality assurance. Even in a “contract society,” the essence of our business is to win the trust of our customer (which happens to be railway authorities in our case). Regarding this point, there is no difference between Japan and the U.S. And the key to achieving this is simply to manufacture products of high quality.

This year, we celebrate the memorable 25th anniversary of our U.S. projects, which is an occasion to appreciate the efforts of our great predecessors who have built up trust and quality. What is required of us as their successors is to make further efforts to enhance the prestige of Kinkisharyo in the U.S. market.