

UNITED STATES MAGLEV COALITION

ANNOUNCEMENT OF AVAILABILITY OF REQUEST FOR QUALIFICATIONS & PROPOSALS FOR MAGLEV GUIDEWAY BEAM DESIGN, FABRICATION, TRANSPORT, TESTING AND INSTALLATION TEAMS

The United States Maglev Coalition is seeking to qualify one or more interested and qualified academic/industrial team(s) with access to the capacity and capability to design, fabricate, transport, install and test Maglev guideway beams of concrete, steel or a composite of the two materials. The beams will be part of Maglev Projects using the Transrapid magnetic levitation technology. Maglev is an advanced transportation technology that uses magnetic forces to lift, guide and propel a vehicle along a guideway at speeds up to 310 mph. The team(s) must have documented skills and qualifications in large projects providing, structural bridge or guideway beam engineering, fabrication, construction, transportation, installation and testing. The guideway beams are a paramount feature of the Transrapid system as they support not only the weight of the vehicle, but also the equipment of the long-stator linear motor. There are two general types of beams: elevated and at-grade. The beam must satisfy the project-specific performance criteria as provided by the technology provider. The vehicles are levitated and guided along the guideway through the use of conventional electromagnets that require strict tolerances on the deflection of the beam (defined as $d_{max}=l/4000$ for single span beams and $d_{max}=l/4800$ for double span beams).

This project must be carried out as a technology transfer project to the extent that a non-U.S. firm would supply the Maglev technology. In addition, the project must be carried out using materials at least 70% of which are manufactured in the United States. Therefore, this solicitation is open only to interested teams that will establish and implement plans for U.S. production. The Maglev Coalition reserves the right at its sole discretion to reject all proposals or accept one or more, or select individual firms from two or more proposals and reconstitute them into one or more new combinations that will be acceptable.

Although the qualifications and proposals are to demonstrate the capability of contributing to the construction of the entire project, teams will be expected to participate in a two phase project. Phase 1 will require education and training regarding the Maglev system technology and beam design, fabrication, installation and performance requirements; preparation of a conceptual plan for domestic fabrication, manufacture, transport and installation of the guideway beams. In addition, preparation of a non-binding cost estimate to carry out fabrication, delivery, installation and testing of a prototype guideway beams is necessary. Phase 1 should result in the preliminary design of a cost-effective guideway beam that meets U.S. standards as well as technology specifications. Phase 2 will require actual fabrication, transport, installation and testing of a prototype beam at Transrapid's test facility in Emsland, Germany.

The USMC will fund Phase 1 from monies provided by contributing entities. Phase 2 will be funded by additional monies from existing projects, private companies and transportation legislation.

For a copy of the Request for Qualification and Proposal contact Richard B. Cochran, Executive Director, United States Maglev Coalition, at rcochran@usmaglevcoalition.com. Responses to the RFQ and Proposal are due by April 30, 2004.