

Goals and Mandate of the NMRANet Technical Working Group

1. Develop standards to define a communications bus that will manage and control devices that are independent of train control on a model railroad layout.
2. This bus shall be capable of working independently from other train control busses.
3. This bus should be capable of bridging commands from other train control busses. The bus shall be capable of bridging commands from a DCC bus.
4. Developing a set of instructions for track control is outside the scope of this working group at this time. However, the bus shall have the capability of managing and controlling devices that effect train control.
5. The bus shall be designed so that the complexity to the user is minimized. Management and configuration of devices as well as fault finding of the system or individual devices shall require little to no technical knowledge of the bus by the user.
6. Maximum utilization of existing globally standardized communication technologies should be used to develop this bus. Multiple forms of communication transport shall co-exist. Generic implementations to enable all forms of communication shall not be required if it greatly impacts the size/cost/complexity of the solution. Defining communication technologies is beyond the scope of this WG.
7. The bus shall be owned by, and under the control of, the NMRA. All future changes to this bus shall be controlled by NMRA.
8. Develop a bus that minimizes the amount of certification testing required of NMRA. Certification of this bus should not require special testing equipment beyond a computer and appropriate connections.
9. Develop a set of NMRA Standards and Recommended Practices that fully define the characteristics of the bus which can be used by manufacturers to develop products.
10. Develop NMRA education and marketing material to inform the users on the benefit, concepts and usage of the bus.
11. Ultimately this bus shall be named the NMRANet.
12. NMRA Working Groups shall be kept informed on the development of this Working Group and be allowed to offer suggestions or comments on the Standards and Recommended Practices being developed.