1. Historical Overview of Industrial Automation and Communication Networks.
2. Networked Control Systems (NCS)
   - Definition;
   - Architectures;
   - Problems.
   • Reduced wiring;
   • Intelligent devices;
   • Distributed control;
   • Simplified wiring of a new installation results in fewer, simpler drawings and
     overall reduced control system engineering costs;
   • Lower installation costs.
4. Hierarchical levels in Industrial Communication Networks. Basic characteristics
   and examples of:
   a) Field-Level Industrial Communication Networks - CAN, DeviceNet, Foundation
      Fieldbus, Profibus-PA, LonWorks;
   b) Control-Level Industrial Communication Networks - ControlNet, Profibus-DP;
   c) Information-Level Industrial Communication Networks (Industrial Ethernet):
      Ethernet/IP, Modbus/TCP, FF-HSE, PROFINet, EtherCAT, Ethernet Powerlink, IDA.
5. The VALUE of Information