

# ISO 11783-4:2011-12 (E)

## Tractors and machinery for agriculture and forestry - Serial control and communications data network - Part 4: Network layer

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
4	Description .....	2
4.1	Role of the network interconnection unit (NIU) .....	2
4.2	Role of the network layer .....	3
5	Requirements .....	6
5.1	Network interconnection unit (NIU) .....	6
5.2	Network topology .....	6
5.3	Network addressing .....	6
6	Network interconnection unit functions .....	7
6.1	Forwarding .....	7
6.2	Filtering .....	7
6.3	Address translation .....	8
6.4	Message repackaging .....	8
6.5	Network message .....	8
6.6	Database management .....	10
6.7	Network topology information .....	14
6.8	Network interconnection unit parametrics .....	16
6.9	Forwarding destination-specific messages by establishing a connection .....	22
7	Types of network interconnection units .....	29
7.1	Repeater .....	29
7.2	Bridge .....	29
7.3	Router .....	30
7.4	Gateway .....	30
7.5	Tractor ECU .....	31
Bibliography .....		32