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SPECIFICATION

IEC
PAS 62409

First edition
2005-06

**Real-time Ethernet for
Plant Automation (EPA®)**

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INTRODUCTION

Considering the increasingly use of information technology (IT) with established standards, such as TCP/IP and XML, in modern industrial automation, this PAS provides a EPA[®] (Ethernet for Plant Automation) system architecture and communication services and protocols specification to meet the demand of deterministic communication based on the commonly known as Ethernet. EPA network uses provision from ISO/IEC 8802-3:2000 for the lower communication stack layers and additionally provide more predictable and reliable real-time data transfer and means for support of precise synchronization of automation equipment.

It contains the following items:

- 1) EPA system architecture
- 2) Data Link Layer protocol specification
- 3) Application Layer Service definition
- 4) Application Layer protocol specification
- 5) XML based EPA Device Description specification

In EPA systems, regular Ethernet traffic is supported in parallel. For that purpose of higher transmission priority, a registered number 0X88BC for LENGTH/TYPE segment is used.

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Real-time Ethernet for Plant Automation (EPA®)

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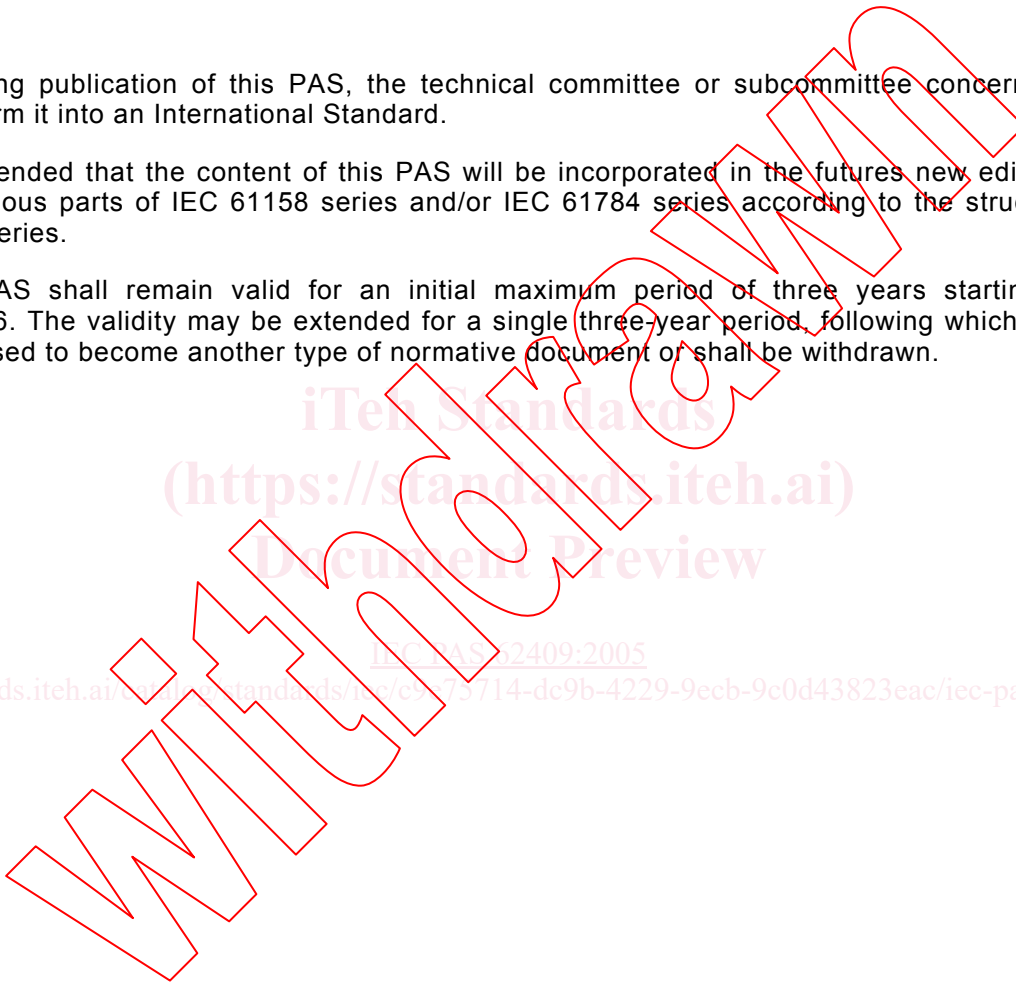
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