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# **Guidance on Industry Standard for Human Machine Interface**

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**GIS 30-451**

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**BP GROUP**  
**ENGINEERING TECHNICAL PRACTICES**

## Foreword

This is the first issue of Engineering Technical Practice (ETP) BP GIS 30-451. This Guidance on Industry Standard (GIS) is based on parts of heritage documents from the merged BP companies as follows:

### BP

1400-20-IC-LI-5301      Process Control System and Human-Machine Interface Equipment Selection List.

### British Petroleum

GS 130-3      Pre-Delivery Testing and Inspection of Instrumentation and Control Systems.  
GS 130-8      Guidance for Specification of Control Systems.  
GS 130-8      Guidance for the Supply of Control Systems.

### Amoco

PTA AD-PEP-00-G      Administration—PTA Engineering Practices—Guide.  
PTA PC-DCS-00-P      Process Control—DCS—Supply Specification.

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## 1. Scope

- a. This Guidance on Industry Standard (GIS) provides guidance on:
  - 1. Major application components of the primary HMI, including HMI software and general functionality required.
  - 2. HMI user interface functionality.
  - 3. HMI configuration.
  - 4. Application development environment either included within or compatible with the suite of application components provided by the primary HMI software vendor.
- b. This GIS is applicable for chemical plants, gas plants, refineries, and offshore facilities.
- c. This GIS focuses on what functionality the system should support, rather than what a supplier will configure or build on that system.

## 2. Normative references

The following normative documents contain requirements that, through reference in this text, constitute requirements of this technical practice. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

### BP

|            |                                                                             |
|------------|-----------------------------------------------------------------------------|
| GIS 30-491 | Guidance on Industry Standard for General Requirements for Control Systems. |
| GP 30-45   | Guidance on Practice for Human Machine Interface for Process Control.       |
| GP 30-49   | Guidance on Practice for Standard for Control System Documentation.         |

### American Petroleum Institute (API)

|            |                                      |
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| API RP 554 | Process Instrumentation and Control. |
|------------|--------------------------------------|

### EEMUA

|               |                                                                |
|---------------|----------------------------------------------------------------|
| EEMUA Pub 191 | Alarm Systems. A Guide to Design, Management, and Procurement. |
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## 3. Definitions

### System Design Specification (SDS)

A detailed system hardware and software specification of the control system.

## 4. Symbols and abbreviations

For the purpose of this GIS, the following symbols and abbreviations apply:

|     |                           |
|-----|---------------------------|
| CSH | Control system hardware.  |
| DHS | Data Historian System.    |
| ESS | Emergency Support System. |

