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# Guidance on Practice for Process Control Networks

**GP 30-60**

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

## Foreword

This is the first issue of Engineering Technical Practice (ETP) BP GP 30-60. This Guidance on Practice (GP) is based on parts of heritage documents from the merged BP companies as follows:

### BP

BP Upstream Process Control Networks Code of Connection.

Framework for Process Control Computing Infrastructure.

The set of Policies and Practices documents from the BP Process Control Digital Protection Programme.

### BP Chemicals PTA

PTA PC-COM-00-E      Process Control—Computer and Communication Systems—Specification.

### BP Gulf of Mexico Deepwater (GOMDW)

1400-20-IC-RP-5004      Telecommunication Systems Design Philosophy.  
1400-20-IC-RP-5065      Control System Network Design Guidelines.  
1400-20-IC-SP-5205      Telecommunication Systems Integrator Scope.  
1400-20-GE-SP-0100      Special Requirements for Spar and Semi-submersible Floating Offshore Installations.  
1400-20-IC-DG-7020      Control System Conceptual Architecture Block Diagram.  
1400-20-IC-RP-5001      Instrumentation and Control Systems Design Philosophy.

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## Table of Contents

|                                                     | Page |
|-----------------------------------------------------|------|
| Foreword .....                                      | 2    |
| 1. Scope .....                                      | 3    |
| 2. Normative references .....                       | 3    |
| 3. Terms and definitions .....                      | 3    |
| 4. Symbols and abbreviations .....                  | 3    |
| 5. Plant networks .....                             | 3    |
| 5.1. General .....                                  | 3    |
| 5.2. Network types and applications .....           | 3    |
| 6. Network model .....                              | 3    |
| 7. General Security .....                           | 3    |
| 7.2. Application security .....                     | 3    |
| 7.3. System Hardening .....                         | 3    |
| 7.4. Crisis Response Planning .....                 | 3    |
| 7.5. Version control .....                          | 3    |
| 7.6. Management client software .....               | 3    |
| 8. Redundancy and backup .....                      | 3    |
| 9. Documentation .....                              | 3    |
| 9.1. General .....                                  | 3    |
| 9.2. As-built documentation .....                   | 3    |
| 9.3. Handbooks and manuals .....                    | 3    |
| 9.4. Operating, installation, and maintenance ..... | 3    |
| 9.5. Dossiers .....                                 | 3    |



## 1. Scope

- a. This GP provides guidance for the selection, design, project development, installation, and use of process control networks (PCNs) and the systems that provide process control of operational assets.
- b. This GP includes:
  1. Discussion on how to determine which applications belong on a PCN rather than on a network of another configuration.
  2. Discussion on security issues that support proper separation between the networks.
- c. This GP does not apply to assets that are owned and managed by BP Digital and Communication Technology, such as the COE environment

## 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.

Latest versions of all documents listed below are posted at <http://cybersafe.bpweb.bp.com/>

### Process Control Digital Security Practices

[PCDS Policy](#)

[Network Design Practice](#)

[Firewall Practice](#)

[SGS Schedule of Services](#)

[SGS 5420 Product Information](#)

[SGS Deployment Guidelines](#)

[SGS PIQ](#)

[SGS Strong Authentication Guidelines \(under development\)](#)

[Anti Virus Practice](#)

[Anti Virus Whitepaper](#)

[COE Anti Virus Technical Configurations](#)

[Security Monitoring Practice](#)

[Security Monitoring Technical Guidance](#)

[System Monitoring Checklist \(under development\)](#)

[Systems Services and Attack Points Guidance](#)

[Simple IDS Technical Guidance](#)

[Remote Access Practice](#)

[PCN iLink Technical Configurations \(under development\)](#)

[Webex Technical Configurations](#)

[WTS Technical Configurations](#)

[System Hardening Practice](#)

[Denial of Service Hardening Guidance](#)

[VMS Hardening Guidance](#)

[802.11 Wireless Ethernet Practice](#)

Supporting Documents

[Good Password Guidance](#)

[Glossary](#)

[IDS White Paper](#)



## BP PCN Risk Reduction Assessment and Guidelines

Risk Assessment and Reduction Framework.

[Risk Assessment Tool](#)

[Risk Reduction Workshop Agenda](#)

[Risk Reduction Plan](#)

[Risk Assessment and Reduction Framework Implementation Guide](#)

[Risk Assessment Worked Example](#)

Risk Reduction Guidance.

[Guidance for dial-up modem.](#)

[Guidance for virus protection.](#)

[Guidance for wireless Ethernet networks.](#)

[Guidance for remote workstations / servers.](#)

[Guidance for network connection.](#)

[Guidance for cyber incidents and crisis response.](#)

### 3. Terms and definitions

For the purposes of this GP, the following terms and definitions apply:

#### **Bandwidth**

Data/communications transmission capacity.

#### **Common operating environment (COE)**

BP standardized, common DCT selection of hardware, application software, operating systems, and infrastructure.

#### **Documentum**

Enterprise document management software provided by Documentum, Inc.

#### **Encryption**

Transformation of data, for the purpose of privacy, into a format that is unreadable until reformatted with a decryption key.

#### **Firewall**

A functional unit that acts as an interface between a private, internal network (for example, a BP facility network) and an external network (for example, the Internet). Firewalls filter traffic between the networks to protect the private network from electronic intrusion and attack that originates from the external network.

#### **Hypertext transfer protocol (HTTP)**

Protocol used by Web servers and client browsers to communicate and move documents on the Internet.

#### **Internet protocol (IP)**

A standard protocol used with the Internet that works with TCP protocol to allow communication between computers over networks. IP is the protocol responsible for moving packets of data between nodes, acting as an intermediary between the higher protocol layers and the physical network. Refer to TCP/IP.

