



Document No.	GP 43-55
Applicability	Group
Date	22 December 2005

Guidance on Practice for Management of a Pipeline Corridor

GP 43-55

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 43-55 providing guidance on how to manage a pipeline corridor.

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Introduction

Application of systems and procedures for management of a pipeline corridor forms a key part of the pipeline integrity management system and if implemented correctly should make a major contribution to reducing the actual and perceived risks from the presence of the pipeline.

This GP therefore provides guidance on the principle techniques and activities which form part of an effective pipeline corridor management system.



1. Scope

This GP provides general guidance for the processes to be applied in the management of onshore pipeline corridors during the operations phase of an onshore/cross country pipeline to minimise overall risk, prevent incidents, maintain records, and ensure adequate liaison with all parties who may be affected by the presence of the pipeline. The GP also provides general guidance for offshore pipelines.

The guidance is intended to be used by those responsible for lands management and maintenance of a pipeline in defining, maintaining, and implementing the pipeline corridor management strategy and activities which form part of the pipeline integrity management system. The guidance is also pertinent to project personnel responsible for route design and construction management particularly with regard to minimising issues from the project phase that may have significant impact during subsequent long term operation.

The activities defined in this GP form a key part of the duties and responsibilities to be discharged by the pipeline Operator as defined in GP 43-06.

Whilst the document is mainly focused on lands issues affecting onshore pipelines, many of the principles are also relevant for offshore subsea pipelines. Where surveillance differences for offshore apply this GP provides guidance.

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.

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GP 04-80	Guidance on Practice for Unexploded Ordnance Risk Mitigation Strategy for Projects.
GP 43-06	Guidance on Practice for Responsibilities of a Pipeline Operator.
GP 43-28	Guidance on Practice for Pipeline Crossings.
GP 43-29	Guidance on Practice for Land Acquisition for Pipelines.
GP 43-47	Guidance on Practice for Pipeline Commissioning and Handover to Operations.

3. Terms and definitions

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

Encroachment

Any third party activity within the Pipeline Corridor not associated with pipeline operation or which is not normally permitted by Pipeline Corridor agreements.

Operator

The party defined in accordance with GP 43-06 responsible for managing the operation and safety of the pipeline in accordance with any Permit to Operate (PTO).



Pipeline Corridor

The strip of land, seabed, or river bed to which the pipeline owner has acquired legal right for the presence of a pipeline or which may be affected by the pipeline or for use in accessing or maintaining the pipeline (e.g. planning zones, building proximity distance, etc.). For offshore lines there is normally a corridor which restricts anchor placement to outside the corridor width

4. Symbols and abbreviations

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

AGI	Above Ground Installation
ESIA	Environmental and Social Impact Assessment
GIS	Geographic information system
KPI	Key performance indicator
ROW	Right of Way
SCADA	Supervisory control and data acquisition

5. Handover from project phase**5.1. Project handover data requirements**

- a. The data generated by completion of the pre-project and project land acquisition processes described in GP 43-29 shall form the basis for future Pipeline Corridor management processes.
- b. The handover process from the project team to the Operator (see GP 43-47) shall ensure that relevant route design and land acquisition data generated during the land acquisition process and construction process are appropriately catalogued and handed over to the operator.
- c. This data should include:
 1. Verified as-built route and profile drawings/offshore post lay and trenching survey data.
 2. Signed and completed lease or purchase agreements.
 3. Summary of legal agreements and land lease/purchase agreement covenants.
 4. Summary of lease and land purchase payments made and outstanding.
 5. Status of crop compensation payments.
 6. Outstanding reinstatement works with identification of responsibilities and timescales.
 7. Outstanding bio-restoration works with identification of responsibilities and timescales.
 8. Status of any outstanding or potential damage claims raised during construction.
 9. Ongoing or outstanding ESIA, community liaison or social commitment actions.
 10. Land drainage status.
 11. Post construction land condition survey information.



12. Status of any temporary construction access roads.
 13. Settlement berm status.
 14. Status of reinstatement activities outside of the Pipeline Corridor e.g. repair of access roads, fencing, etc. damaged during construction.
 15. Construction contract warranty and defect liability conditions applicable to the construction contractor and how these will be administered.
 16. Crossing agreements, subsea tie-in agreements and riser placement agreements on third party structures.
 17. As built data for subsea equipment and structures and post installation survey data.
 18. As installed vendor data, spares listing, storage records and vendor support information.
- d. The handover process shall identify any outstanding Pipeline Corridor related actions from the construction phase with a clear delineation of responsibilities for close out and agreement between the operator and project team of appropriate contingency sums in the operations or project budgets to ensure effective implementation.

There is normally potential for post construction damage claims from landowners or other affected parties which may arise significantly after completion of construction and expiry of construction contractors warranty obligations. Such claims may typically address ineffective Pipeline Corridor drainage, damage to adjacent drainage systems, soil erosion, Pipeline Corridor settlement, impact on livestock, fencing damage, damage to soil structure, sustained reduced crop yields and can represent a significant portion of the operating budget in early years. Similarly there may be claims for offshore crossings defects or damage due to subsequent offshore vessel activity.

- e. The Operator shall ensure that original copies of legal agreements are stored securely and working copies are available to those parties carrying out the day to day management of the pipeline corridor. Documentation should be provided in electronic with appropriate data backup processes applied.

6. Pipeline Corridor agreements

- a. The Operator shall ensure that the Pipeline Corridor management strategy and activities reflect the commitments and agreements contained in the relevant lease or ownership agreements for the Pipeline Corridor, including:
1. The pipeline right of way.
 2. Control cables.
 3. Cathodic protection ground beds.
 4. Above ground installation compounds.
 5. Transformer rectifier stations.
 6. Power supply cables.
 7. Subsea pipeline associated installations, especially those that may be associated with third party operators
- b. Pipeline corridors may be shared with other parties with underground or over-ground services with supplementary agreements to minimise mutual impact.

The Pipeline Corridor agreements may contain constraints or landowner or Operator commitments on;



- Pipeline Corridor access rights.
 - Vegetation control.
 - Permitted agricultural activity.
 - Livestock provisions.
 - Notice of change of use.
 - Notice of change of ownership.
 - Land drain maintenance.
 - Construction of temporary and permanent structures (may include caravans, trailers, mobile homes, marquees).
 - Surcharging over the pipeline (increasing depth of soil cover).
 - Reduction in depth of cover.
 - Cathodic protection impact on adjacent structures.
 - Notification procedures.
 - Ongoing lease or usage related royalty payments.
 - Access for inspections, particularly for offshore
- c. The Operator shall maintain up to date contact and correspondence details of landowners, occupiers, adjacent third party operators and users who are party to Pipeline Corridor and Crossing agreements through a regular contact and verification programme.
- d. This information should ideally be managed on any GIS system that is used to manage the pipeline (see GP 43-24).

Pipeline landowner and particularly occupier and user information is dynamic and the presence of a Pipeline Corridor on a plot of land is often overlooked by the incoming landowner/occupier/user when there is a transfer. An annual process of formal written contact with landowners with reply paid postcards requesting confirmation of owner/occupier/user details is an effective means of maintaining relevant up to date details. There is significant benefit in reinforcing this process by periodic visits to the landowner or proactive engagement with land owners and occupiers during routine visits to the Pipeline Corridor.

In some countries occupiers or users of the Pipeline Corridor may not have any legal entitlement for occupation or use of the Pipeline Corridor (i.e. squatters) with the associated risk that they may not be aware of the Pipeline Corridor and may engage in agricultural or other activities not permitted by Pipeline Corridor agreements which compromise the pipeline integrity. If this is the case, additional Pipeline Corridor management activities are required by the Operator to monitor occupation and land usage and engage in appropriate contact with such users and potentially require legal action to secure their removal.

In some cases even though Pipeline Corridor occupiers/users may not be party to the Pipeline Corridor agreement they may have secured some occupation or usage rights under local land laws through the precedent of extended unchallenged occupation. It is therefore important to secure appropriate legal advice and law enforcement support before instigating an eviction process.

Prompt removal of unauthorised occupants of the Pipeline Corridor can minimise the risk of adverse public reaction to legally enforced removal at a later stage.

