



Bureau of Safety and Environmental Enforcement

# **BSEE BAST Determination Process**

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National Ocean Industries  
Association

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"To promote safety, protect the environment  
and conserve resources offshore through  
vigorous regulatory oversight and  
enforcement."

# What BAST?

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Outer  
Continental  
Shelf Lands  
Act  
(OCSLA)

*“..on all new drilling and production operations and, wherever practicable, on existing operations, the use of the best available and safest technologies which the Secretary determines to be economically feasible, wherever failure of equipment would have a significant effect on safety, health, or the environment, except where the Secretary determines that the incremental benefits are clearly insufficient to justify the incremental costs of utilizing such technologies.”  
(43 U.S.C. 1347(b))*

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# Development of BAST Process

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*Deepwater Horizon* investigations

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Ocean Energy Safety Advisory Committee - Federal Advisory Committee Act

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Identify and prioritize technologies;

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Include expertise from all sectors;

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Not endorse specific products but provide a basis for establishing appropriate performance standards;

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Focus on technologies, equipment, and/or processes that are most critical for safe operation;

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Evolve as new technologies develop.

# BAST Program Objectives

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Compliance with statutory mandate

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Focus on technological solutions to safety issues

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Focus on critical safety equipment

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Establish performance levels based on evaluation of available technology

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Consistent and verifiable testing

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Transparent process

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Stakeholder engagement

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Satisfies cost/benefit

# **BAST will NOT result in:**

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Prescriptive requirements

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An automatic phase-out of existing technology

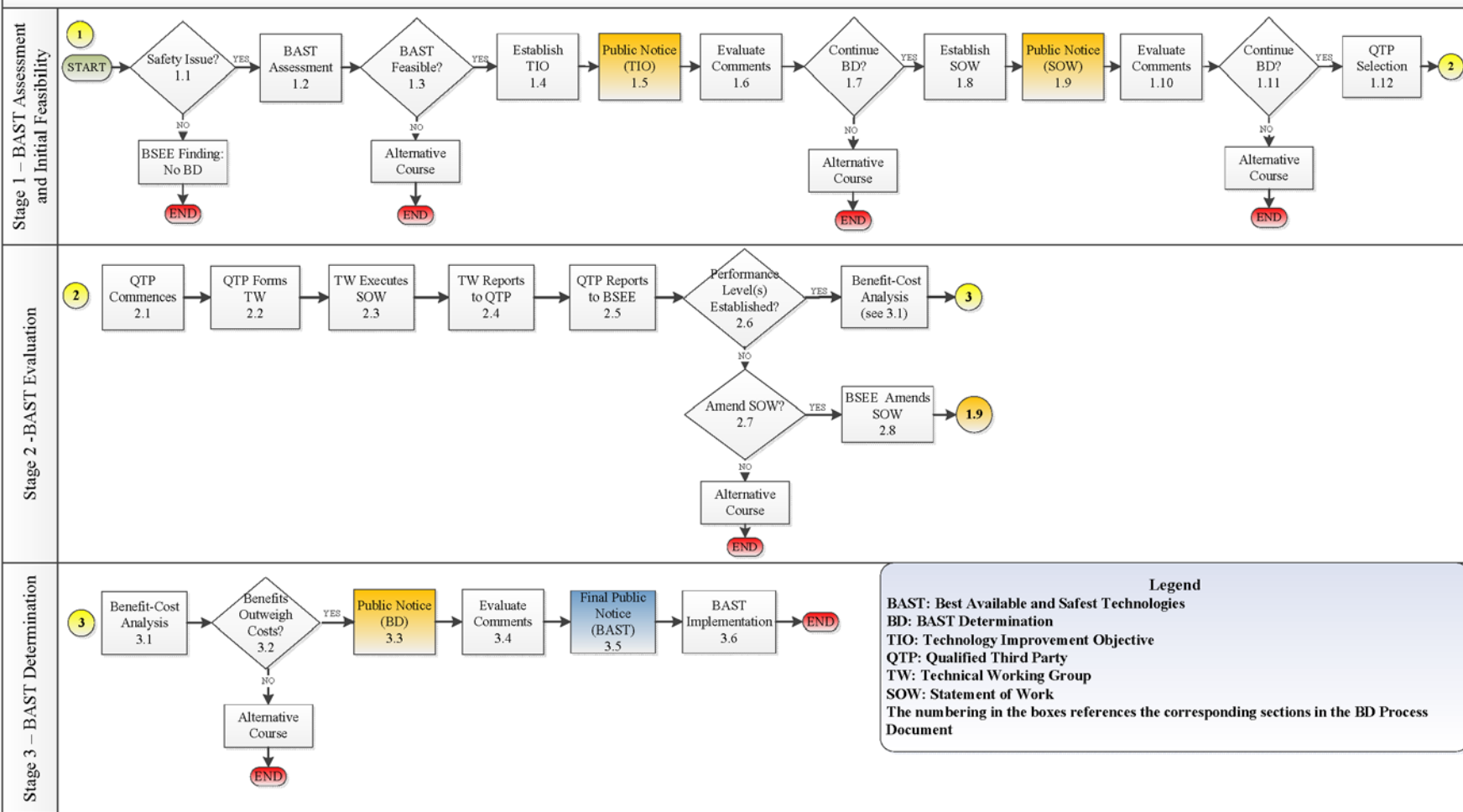
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An automatic review of existing systems and technology

# BAST Determination Process Flowchart

**Figure A: BSEE DRAFT BAST DETERMINATION PROCESS FLOWCHART**

Last Rev Date: October 15, 2015



# BAST Determination Process

## Overview

### Stage 1 - BAST Assessment & Initial Feasibility

- BSEE evaluates circumstances leading to a BD
- BSEE drafts a Technology Improvement Objective (TIO)
- BSEE establishes Statement of Work (SOW)
- BSEE issues Public Notices requesting comments
- BSEE selects Qualified Third Party (QTP)

### Stage 2 - BAST Evaluation

- QTP manages evaluation
- QTP forms Technical Workgroups (TW)
- TW executes SOW
- BSEE reviews findings from QTP & TW

### Stage 3 - BAST Determination

- BSEE conducts economic Benefit-Cost Analysis (BCA)
- BSEE issues Public Notice requesting comments
- BSEE issues Final Public Notice
- BAST requirement needs to be implemented on the OCS

# BAST Determination Process

## Stage 1 - BAST Assessment and Initial Feasibility

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Annual assessment by Director to determine if safety issues (incidents, accidents, near misses) warrant BD

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If a Safety issue has been identified, BSEE conducts an assessment to determine if a BD could resolve the issue by evaluating:

- **Technology Failures**
- **Improvements in Safety**
- **Availability of Technology**
- **BSEE Resources**
- **Economic Feasibility (Initial)**



# BAST Determination Process

## Stage 1 - BAST Assessment and Initial Feasibility

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BSEE develops a TIO explaining the safety issue and the improvement agency is seeking.

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BSEE solicits comments through one of the following:

- **Notice to Lessees (NTL)**
- **[www.BSEE.gov](http://www.BSEE.gov)**
- **Federal Register**
- **Public Forum**

# BAST Determination Process

## Stage 1 - BAST Assessment and Initial Feasibility

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BSEE issues SOW (TIO, tasks, timeline) and solicits comments

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BSEE contracts with QTP to implement SOW

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Who can be a QTP?

- **OESI**
- **Standard Development Organizations (SDO)**
- **Certifying Entities**
- **National/Private Labs**
- **Other Agencies**

# BAST Determination Process

## Stage 2 – BAST Evaluation

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QTP responsibilities include:

Form TW(s) to evaluate solutions to SOW

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Identify scope of testing/additional data needed by TW

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Provide oversight of third party testing/statistical analysis

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Develop budgets/timelines

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Perform industry outreach

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Review TW work, reports, & ensures SOW is addressed

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Provide BSEE with TW final report

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***TW composed of individuals with appropriate technical expertise for task at hand***

# BAST Determination Process

## Stage 2 – BAST Evaluation

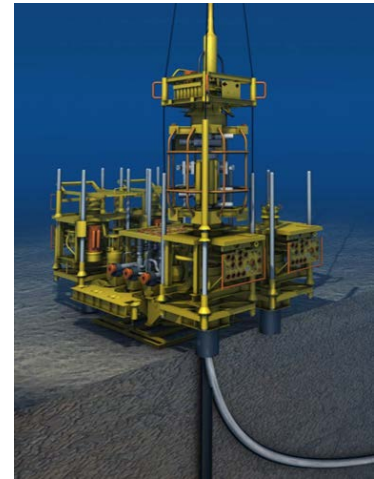
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TW develops Functional (Operational) Requirements (**FoR**)

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**FoR** may include:

- physical requirements*
- environmental conditions*
- inspection/maintenance concerns*
- quality issues*
- other*



# BAST Determination Process

## Stage 2 – BAST Evaluation

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TW Establishes Performance Levels (**PL**)

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**PL** *specifies how well a technology executes its' function* as determined thru testing and/or evaluation of operational history

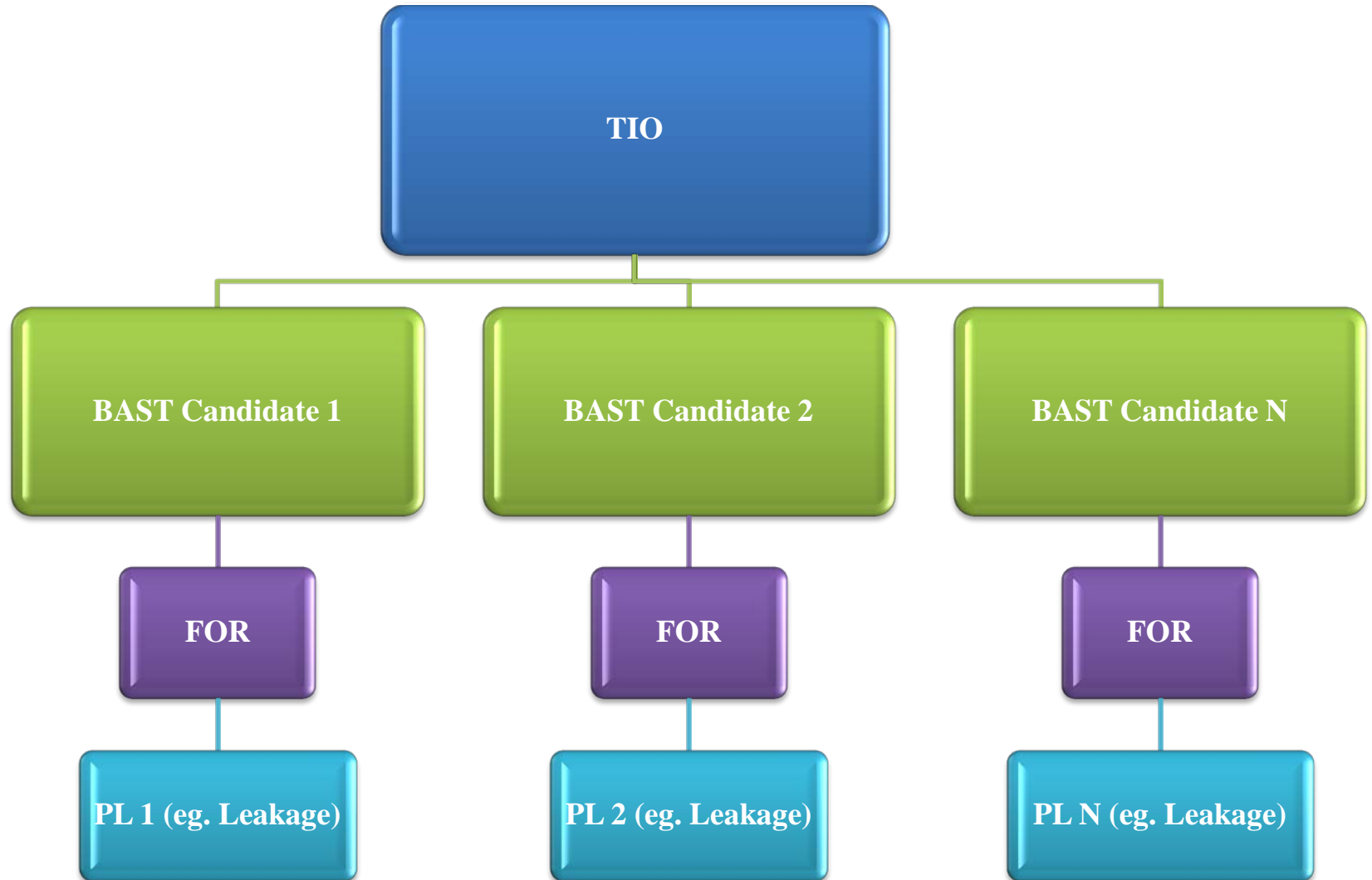
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*TW must address* repeatability & reproducibility of technology as part of their evaluation

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TW compares/assesses **PL** of various technologies that meet **FoR**

# TIO, FoR, and PL Relationship



# BAST Determination Process

## Stage 3 – BAST Determination

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BSEE performs a BCA consistent with OCSLA

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If Director determines that implementation of proposed PL meets BCA then BSEE solicits comments through Public Notice

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Public Notice includes TIO, PL, BAST implementation schedule

# BAST Determination Process

## Stage 3 – BAST Determination

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After evaluating Public Notice comments BSEE determines if it should proceed with BD implementation.

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If BSEE decides to implement the BD the agency will release a final decision including effective date.

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After a BD is effective, operators will be required to use technology that meets specified PL for new and, wherever practicable existing operations.

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Operators may request waiver from BAST requirement for existing operations by submitting the appropriate documentation to BSEE.



# BAST Determination Process

## Alternative Course Methods: Addressing Technology Failures Outside of the BD Process

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BSEE Issues "Safety Alert" or Industry issues "Alert/Notice",

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BSEE or Industry develops revised maintenance, inspection, and/or operational procedures,

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BSEE or Industry R&D,

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Industry develops a new/revised standard or BSEE incorporates them into regulations,

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BSEE issues conditions of approval in plan/permit,

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BSEE develops new/revised regulations

# BDP Summary

## Takeaways



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Three stages

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Performance based

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Transparent – 3 Public Notices requesting comments

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Triggers – domestic/international safety issues

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Technology driven

BSEE Website: [www.bsee.gov](http://www.bsee.gov)

BAST Website:

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Bureau of Safety and  
Environmental Enforcement

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”