

# An overview of Gas Pipelines Safety Challenges and Opportunities

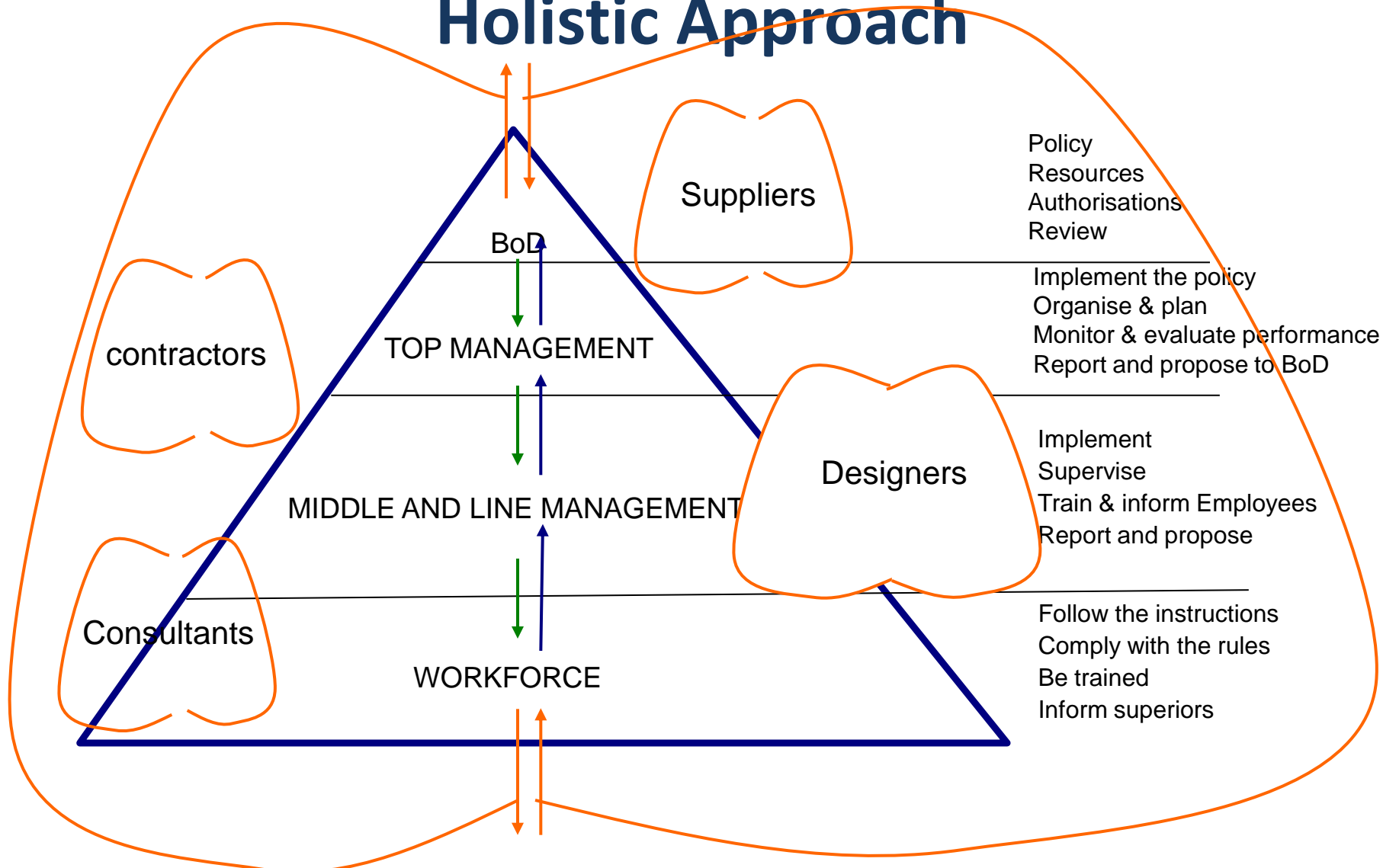
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## *Step by step approach*

- Launching of the programme in October 10
- A more technical workshop today - Specify more technical agendas
- Parallel activities (at Ministries level)
- Workout cooperation with other initiatives
- Approach of international organisations (IOSH, HSE, IGEM etc)
- Consider work groups
- Involve academia

# Safety Management Systems Holistic Approach



# Gas Pipelines Projects Particularities

## A. Linear Project

1. Geological, geotechnical, geophysical, climate issues
2. ROW, Acquisition, Access issues
3. Cross country/ies and interstates/intercountries laws bylaws and rules
4. Third party interference
5. Surveillance, monitoring, measuring needs
6. Construction, operational issues
7. Environmental and Social issues

# Gas Pipelines Projects Particularities

## B. Gas Safety

1. Land use planning
2. Integrity safety
3. System's ESD systems and emergency plans
4. European Gas Grid Standards
5. Third party interference, monitoring and access needs
6. Crossings (natural, utilities, infrastructures) specifications
7. Design, Build, operate resources (human and technical)

# Gas Pipelines Projects Particularities

## C. Administrative, Legal & Business

1. Policies
2. Legal & Administrative
3. Technical
4. Social
5. Environmental
6. Educational
7. Business & Economical

# Gas Pipelines Projects Particularities

*Which of the particularities have a safety footprint?*

*Which they do not have?*

# Gas Pipelines Projects Particularities

- |    |   |           |   |
|----|---|-----------|---|
| A1 | Geological, geotechnical, geographical, geophysical, climate variety and issues | <u>A1</u> | <u>A number of safety studies, methodological analysis, data bases, software</u>                    |
| A2 | ROW, Land acquisition, Access issues  | <u>A2</u> | <u>ROW – safety/access zone, patrolling and access for intervention</u>                             |
| A4 | Third party interference  | <u>A4</u> | <u>Most incidents due to interference</u>   |
| B1 | Land use planning   | <u>B1</u> | <u>Minimise impact either way</u>   |
| B6 | Crossings (natural, utilities, infrastructures) specifications                  | <u>B6</u> | <u>Both systems integrity from operational impact and in case of emergency</u>                      |
| C3 | Technical   | <u>C3</u> | <u>Specifications – integrity safety</u>  |
| C6 | Educational and vocational programmes   | C6        | Resources for Design, Build and Operate safely a safe system – skilful people                       |
| C7 | Business & Economics  | C7        | Marketing a safe product/service, need for equipment and materials, consultants, specialisation etc |



# The result

“ Every system is producing the results it is designed for”



Donald Mark Berwick

...the premise being that both the intended and unintended consequences are designed into our systems.



# TIRANA GAS PIPELINES SAFETY WORKSHOPS

Work together for striving excellence  
in Gas Safety, in Albania



# Contractors Policy Cornerstones

There are four cornerstones in managing contractors. The Owner has to demonstrate clearly that owner:

1. Has in place a clear Safety Policy
2. Has in place contract specific tender H&S requirements including contractor's minimum H&S requirements and the project/scope specific effective HSP/SMS
3. Has in place a competent and committed organisation, duly authorised and possesses an arsenal to manage the Project's Safety and to battle risk generation from day one.
4. Regardless the initial delays and costs, Owner applies the H&S procedures from day one, including Contractor's evaluation.

*Siguria  
eshte civilizim*

*Safety  
is an element of civilisation*

*Management Force Group*