# The Flexible and Sustainable Port Network

#### **FACULTY OF CIVIL AND ENVIRONMENTAL ENGINEERING**

# Vegagerðin





## Dealing with Uncertainty in the Port Planning Process

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#### **OBJECTIVES**

Flexible and Sustainable Port Development:

- 1- FLEXIBILITY: (PORT OPERATION under new or changing requirements)
- 2- SUSTAINABILITY: (ECONOMIC GROWTH in harmony with the **SURROUNDING COMMUNITY and NATURAL ENVIRONMENT)**

#### INTRODUCTION

Ports are developed under a high degree of uncertainty







#### External Stakeholders Power 1.5

Subjects

Increasing safety and security

**Context Setters** 

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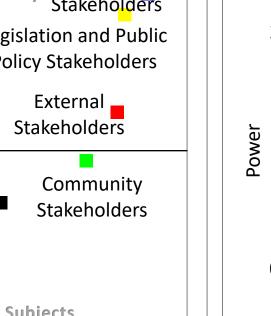
Legislation and Public

Policy Stakeholders

2.5

0.5

0.5



STAKEHOLDER PRIORITIZATION

Stakeholders

Community Stakeholders

Power-interest matrix of stakeholders for the objectives of port planning

0.5

**Creating flexibility** Players Internal External Stakeholde. Academics 0.5 Subjects

Interest

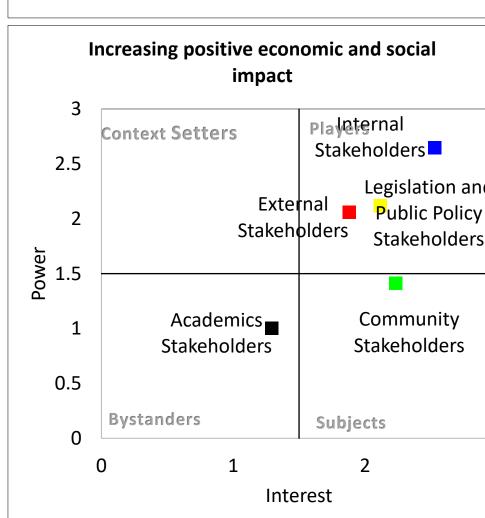
Phterhal Stakeholders

Legislation and Public

**Policy Stakeholders** 

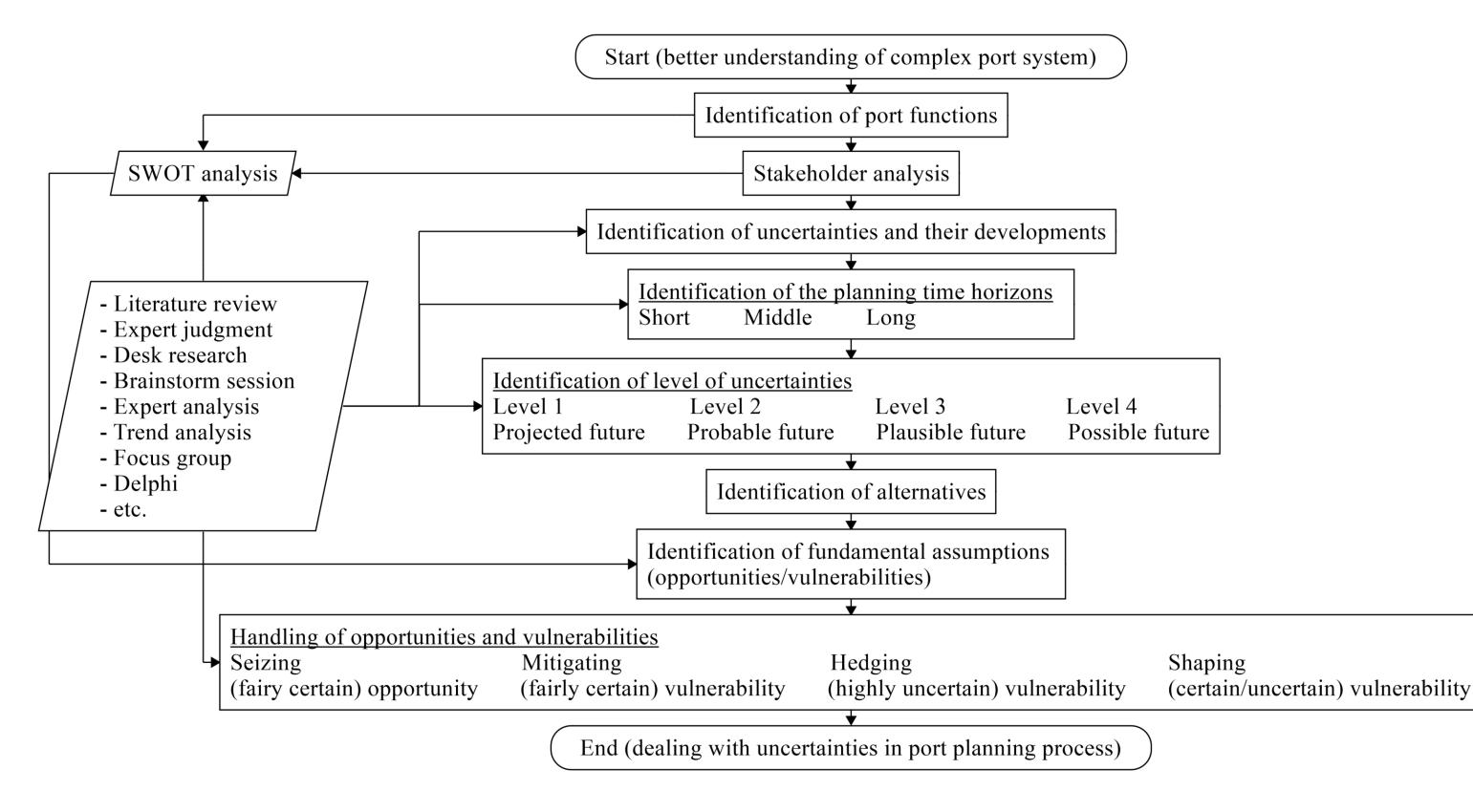
Stakeholders

## 2.5 Stakehold. Legislation and Stakeholders External Subjects



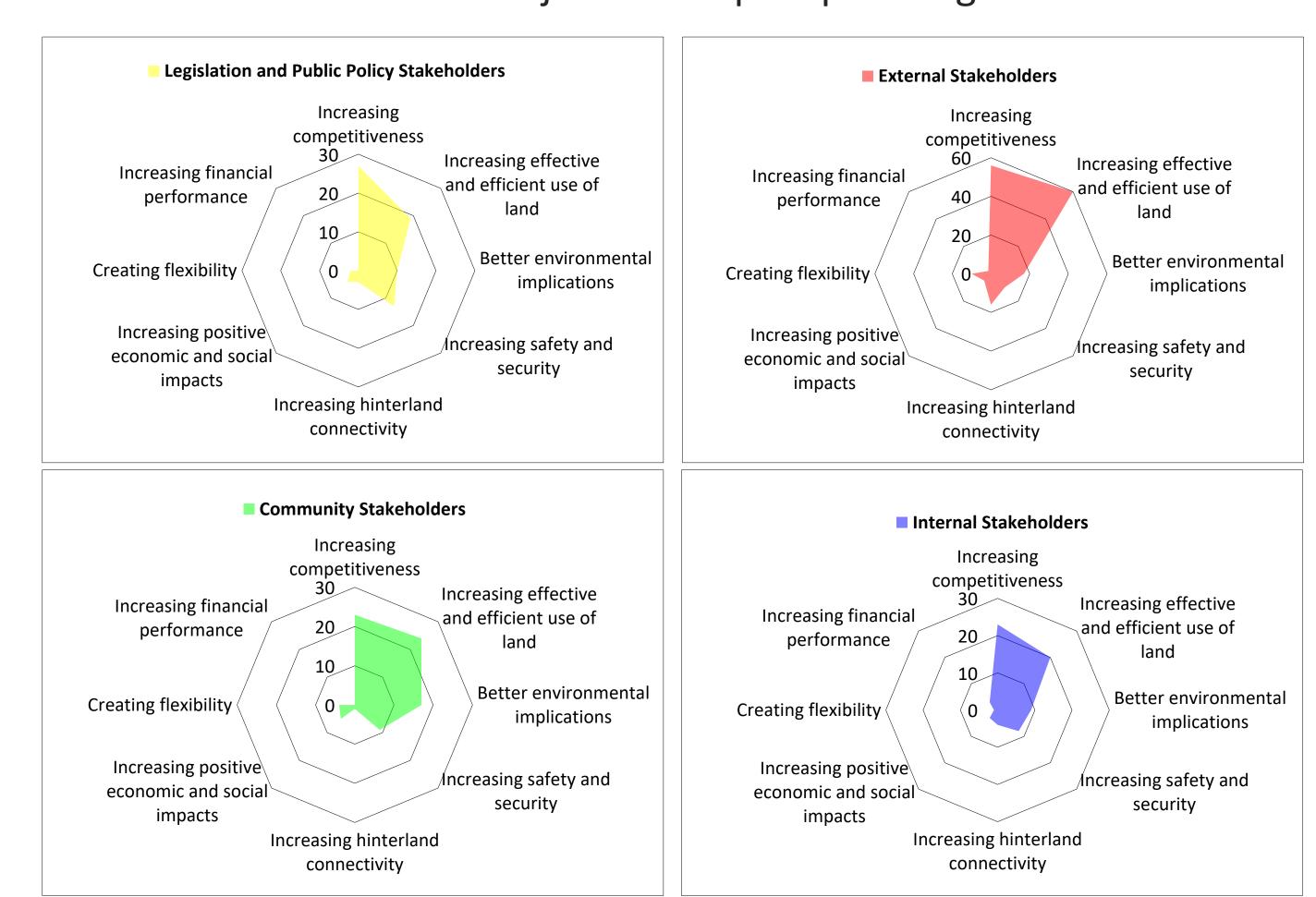
#### **METHODS**

Framework for dealing with uncertainty in the port planning process

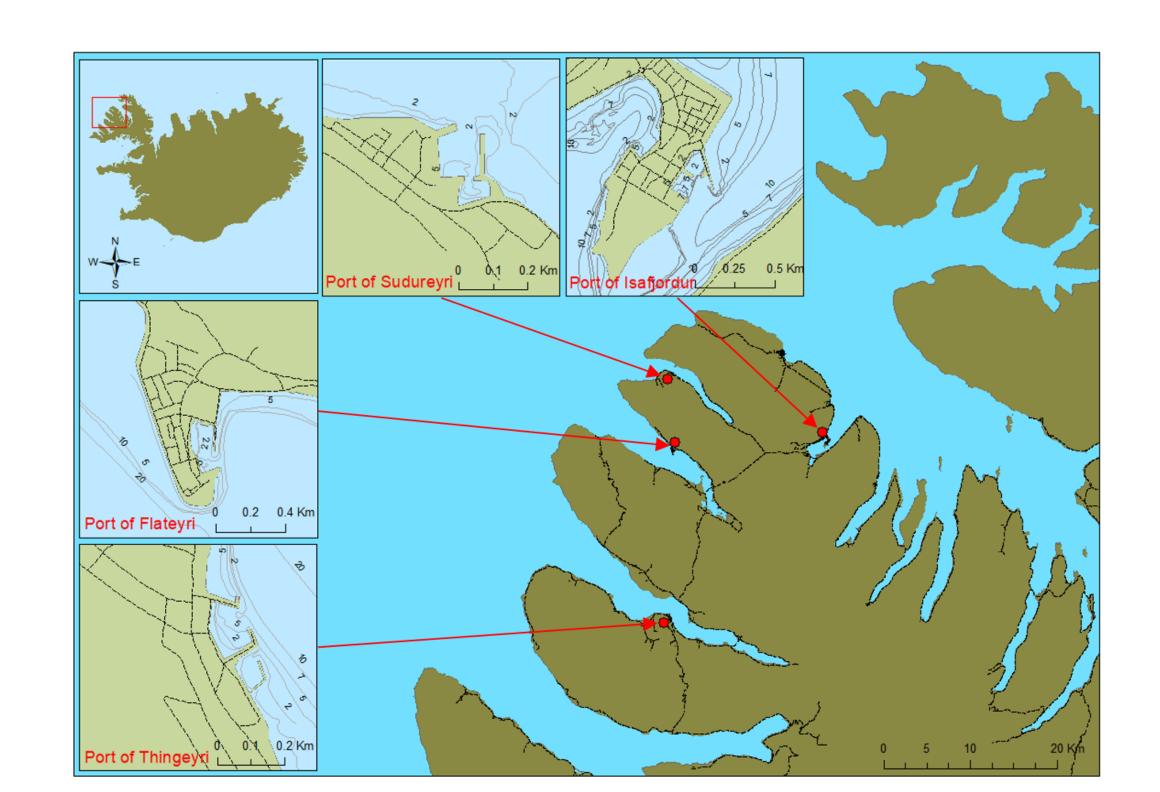


#### **DEFINITION OF SUCCESS**

Attribute of stakeholders to the objectives of port planning



### STUDY AREA



#### Presenter: Dr. Majid Eskafi Reykjavik, October 28, 2022

#### **CONCLUDING REMARKS**

Short-term horizon, 5 years (2020-2025): The port network is faced with opportunities.

• Seizing opportunities: providing storage for cargo and containers, servicing fishing, expedition, cruise, and container vessels.

#### Middle-term horizon, 25 years (2025-2050): The port network is confronted with vulnerabilities.

The volume of container/cargo flow, vessels size, and vessel calls

- Shaping vulnerabilities: invest and improve infrastructure in the port network.
- Shaping and hedging vulnerabilities: strategically improve the smaller ports in the network. Fishing and aquaculture activities
- Shaping vulnerabilities: provide cross-docking facilities and space next to the quay and freight distribution. Cruise market
- Hedging and shaping vulnerabilities: maximize the use of the smaller ports and improve port infrastructure.

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