

# Generic Framework for assessing impacts of offshore Arctic operations

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# **Main objective**

Generic framework to qualify and quantify environmental impacts of offshore operations in the Arctic.

#### **Results**

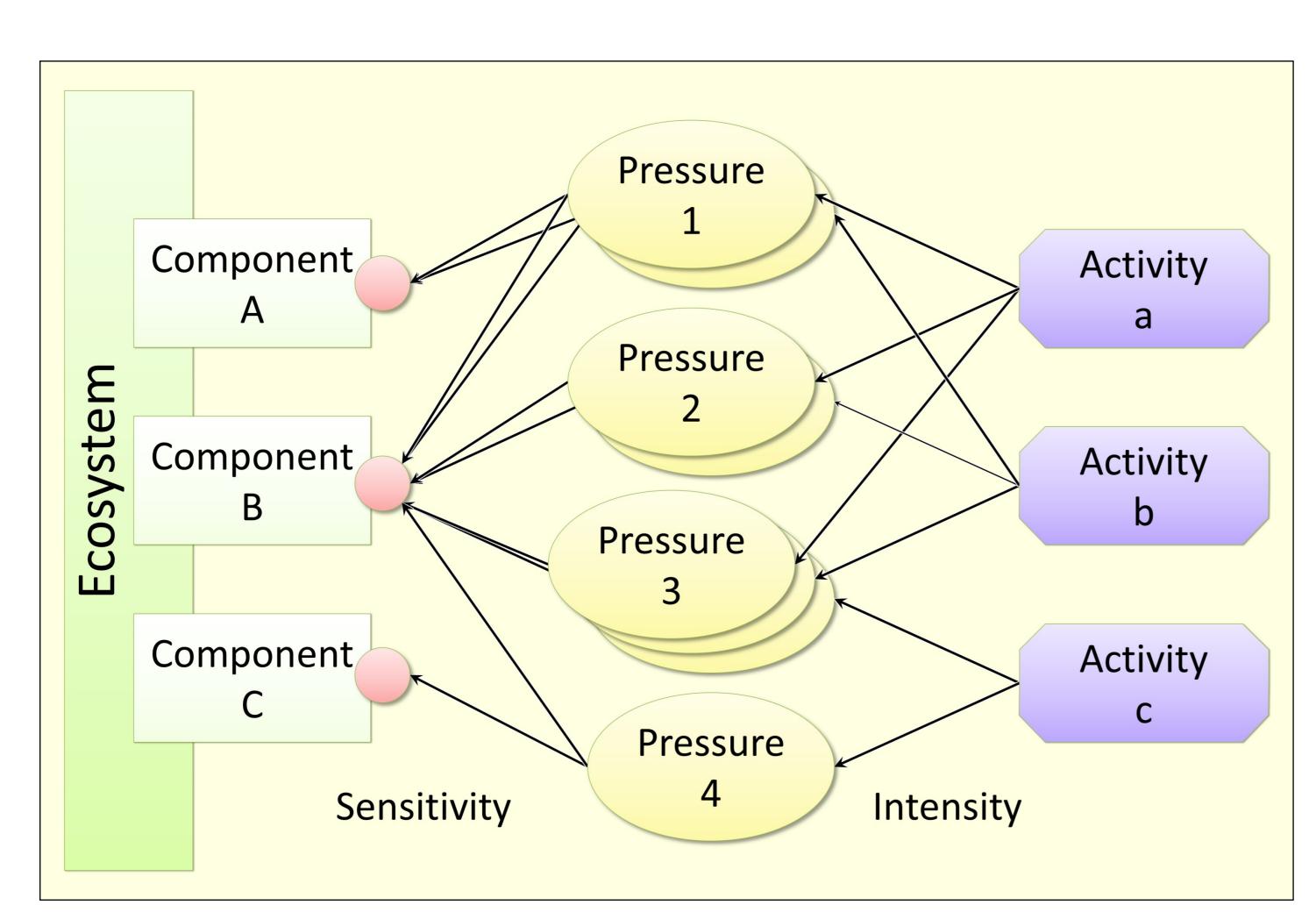
- Standard procedure for EIA
- Cumulative Impact Assessment & Ecosystem Effect Chain
- Effects are a function of the intensity of pressures and the sensitivity of ecosystem components
- Interactions of ecosystem components are included
- Both negative effects as positive effects
- Qualitative approach as scoping for semi-quantitative and quantitative approach
- Semi-quantitative approach results in relative effects
- Quantitative approach results in actual effects



Fjord in Norway (Adrian Zenz)

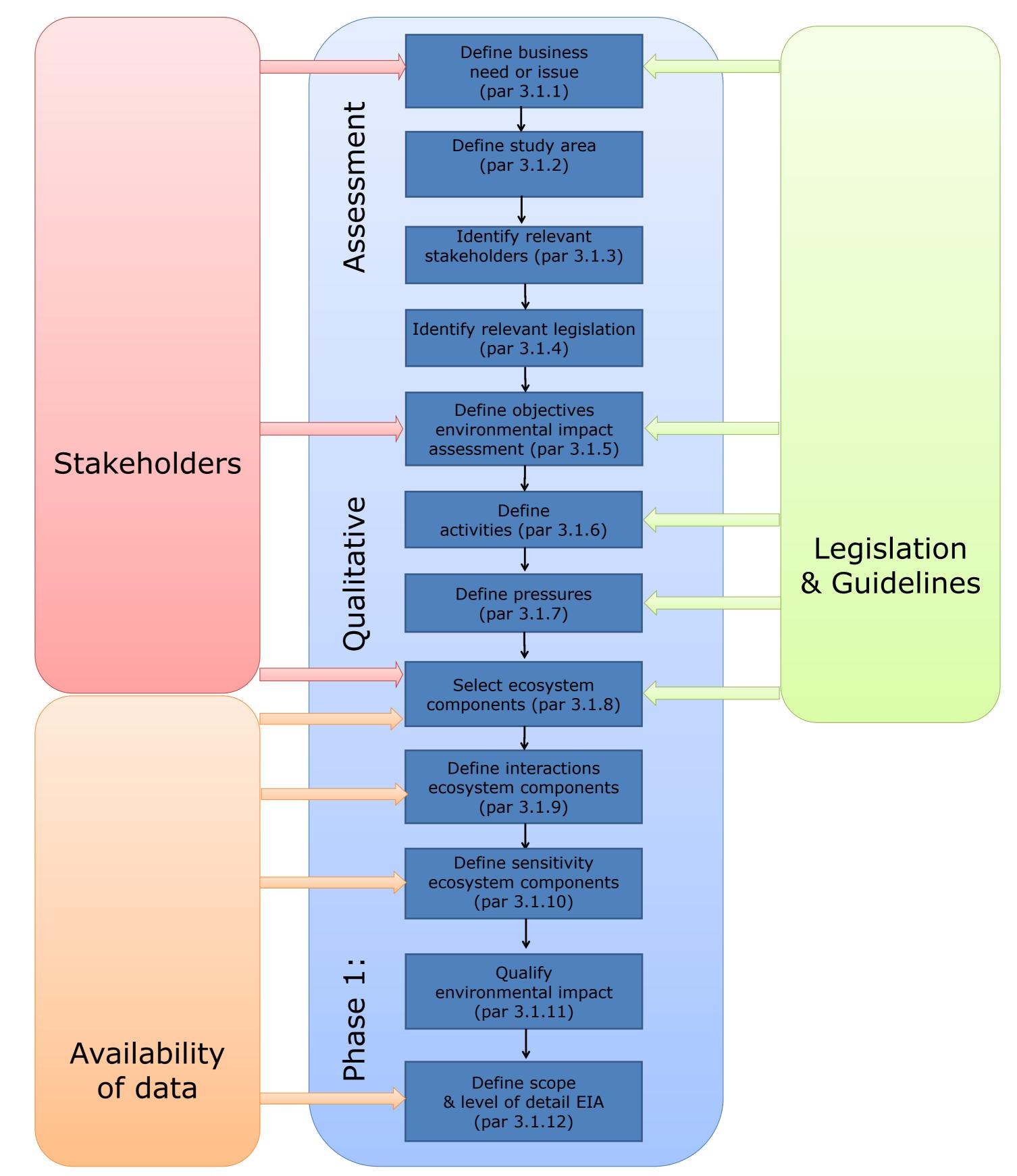
# Gaps

- Testing & validating in case study
- Interactions between ecosystem components in semi-quantitative assessment
- Sensitivity & uncertainty analysis
- Modelling tool for quantitative assessment



# **Network approach**

Karman, C.C. & Jongbloed, R.H. (2008). Assessment of the Cumulative Effect of Activities in the Maritime Area: Overview of relevant legislation and proposal for a harmonised approach. Den Helder: IMARES, report C018/08.



# **Qualitative assessment**

Lagerveld, S., Tamis, J.E., Bolman, B.C., Geelhoed, S., Jak, R. & Scheidat, M. (in prep). Arctic Handbook – Generic Framework Environmental Impact Assessment. Den Helder: IMARES.