SESG Summary and conclusion

24-11-2022 @ USN Kongsberg

2pm – 5pm

SESG numbers and data

- SESG facilitators: 2
- Coffee with cookies available: Yes ☺
- Duration: 3 hours
- Participants: ~60 (people from industry and academia, including SESG facilitators)
- Presentations: 3
- Presenters: 3 (2 from an acquisition organization, 1 from a supplier, 1 from USN)
- Workshop groups: 10 (4-6 people in each group)
- Posters with group feedback

SESG event 24th November, 2022, 14:00-17:00

Title: How to be a customer in relation to SE efforts? How does SE support acquisition?

Brief description:

The customer that is buying or outsourcing the development of a solution feels responsible for the "upper" part of the V-model, leaving the responsibility for the bottom part of the V-model to the solution supplier. Where should the interface be between customer and supplier? How much should each party understand the other party's side? How is the interaction between both parties?“

Speakers:

- Simon Løkja Følling, Supplier perspective
- Sidsel W. Storaas
- Jo Gravås and Ingeborg Ø. Garen, NDMA as acquisition Organization

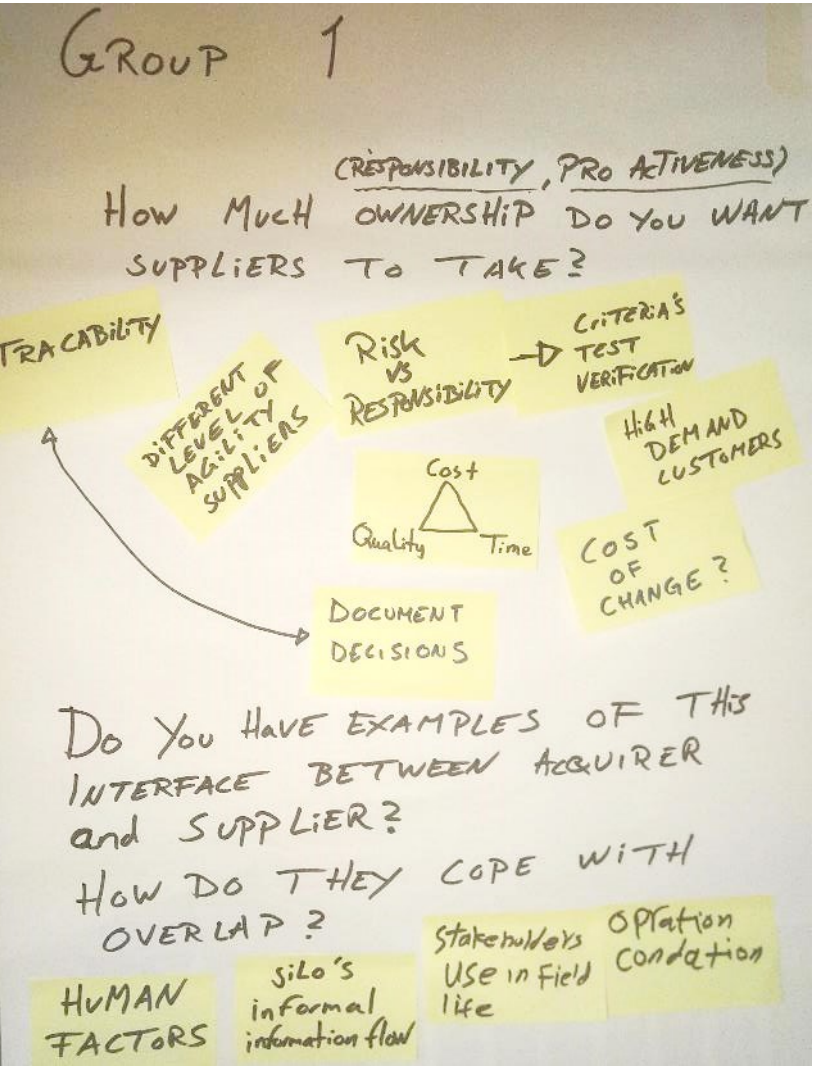
Initiating questions for group work

How Much **Ownership** (responsibility, pro-activeness) do you want **Suppliers** to take?

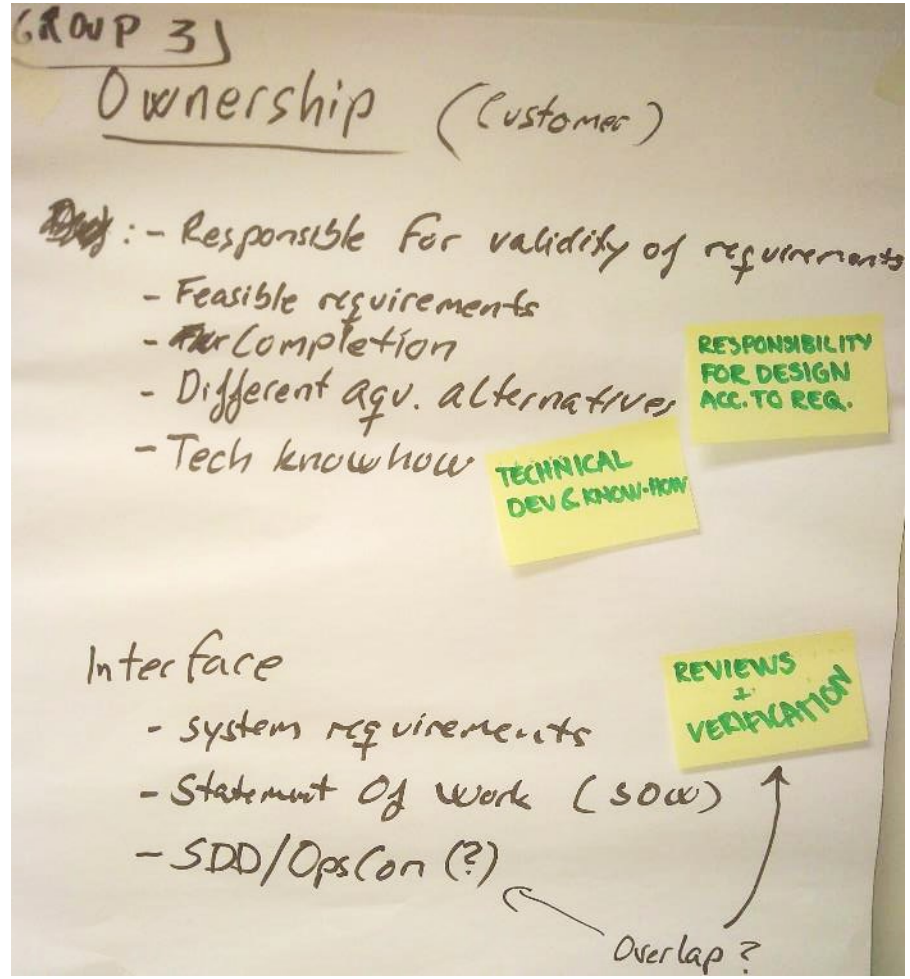
Do you have exampls of this interface between acquirer &

supplier? How do they cope with the overlap?

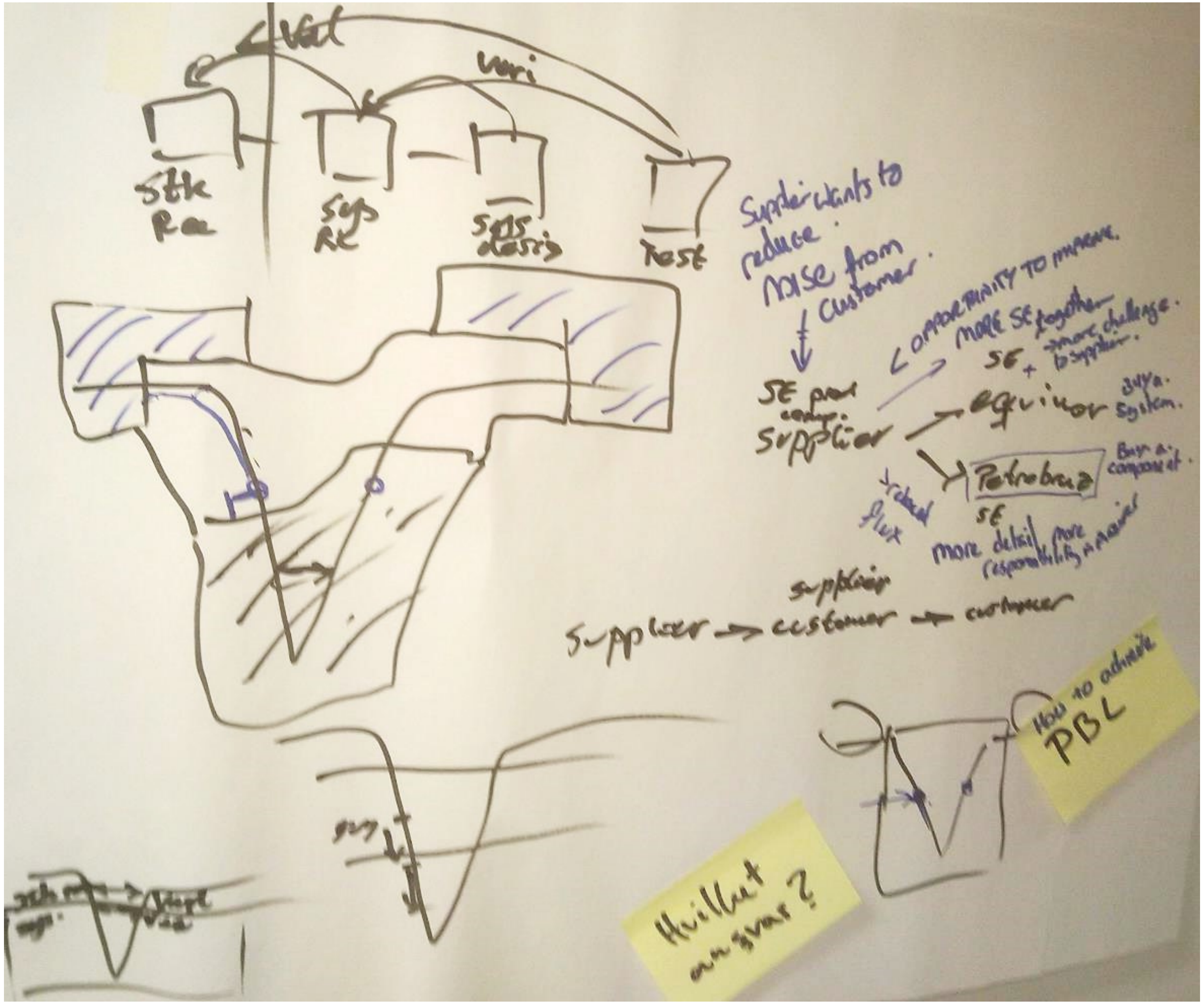
Next slides show the flips of the breakout teams

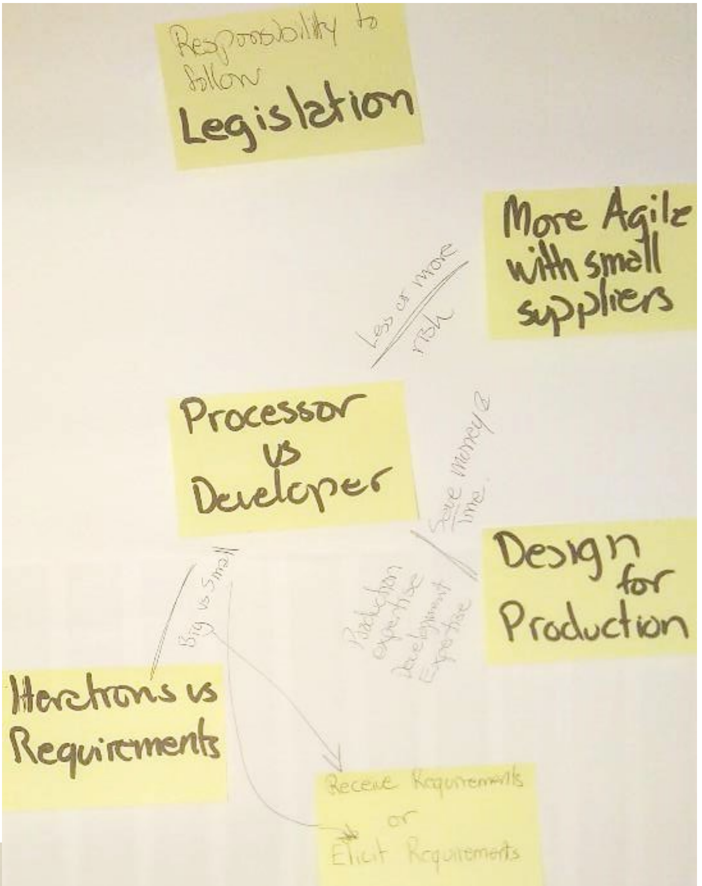

GROUP 1
(RESPONSIBILITY, PRO ACTIVENESS)
HOW MUCH OWNERSHIP DO YOU WANT SUPPLIERS TO TAKE?
TRACABILITY
DIFFERENT LEVEL OF AGILITY SUPPLIERS
RISK VS RESPONSIBILITY
CRITERIA'S TEST VERIFICATION
HIGH DEMAND CUSTOMERS
Cost
Quality
Time
COST OF CHANGE?
DOCUMENT DECISIONS
DO YOU HAVE EXAMPLES OF THIS INTERFACE BETWEEN ACQUIRER and SUPPLIER?
HOW DO THEY COPE WITH OVERLAP?
HUMAN FACTORS
SILO'S INFORMAL INFORMATION FLOW
STAKEHOLDERS USE IN FIELD LIFE
OPERATION CONDATION

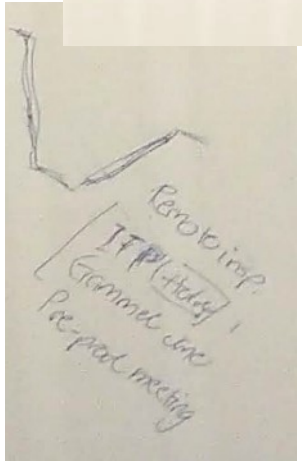

2
DOMAIN OIL, LAND DEFENCE, SPACE
COMPANY DNA
TILLIT TRUST
FORSTÅELSE UNDERSTANDING
KUNNSKAP KNOWLEDGE
EXAMPLES:
ROOFING
HEAD PHONES ME OR ME AS EMPLOYEE
EQVINOR - DSME - MANUFACTURER
NOVELTY PACE
(NTCP)
COMPLEXITY TECHNOLOGY

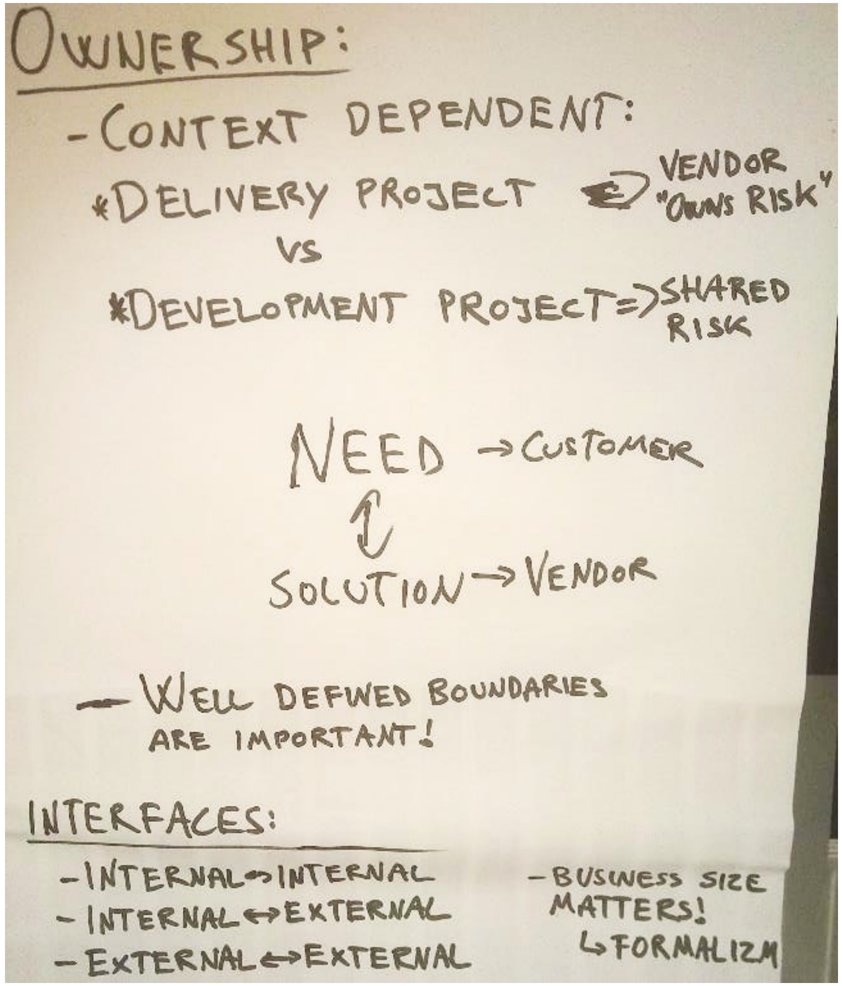

GROUP 3
Ownership (Customer)
:- Responsible for validity of requirements
- Feasible requirements
- Completion
- Different agv. alternatives
- Tech knowhow
RESPONSIBILITY FOR DESIGN ACC. TO REQ.
TECHNICAL DEV & KNOW-HOW
Interface
- system requirements
- Statement Of Work (SOW)
- SDD/OpsCon (?)
REVIEWS + VERIFICATION
Overlap?


Control
Ownership
Low Innovation
High Innovation
Controlled
Flexibility
Low Risk
High Risk
High Control
Low control
Forsvaret
FMA
KDA
ARD
SIT
Forsvaret MoE
FMA MoP
KDA


Stk Req
Sys design
Test
Supplier wants to reduce noise from customer.
Opportunity to improve.
more SE together
Equinor
Petrobras
supplier
Supplier → customer → customer
How to achieve PBL
Hvilket ansvar?


Responsibility to follow
Legislation
More Agile with small suppliers
Less or more risk
Processor vs Developer
Save money & time
Design for Production
Production expertise
Development expertise
Big vs Small
Iterations vs Requirements
Receive Requirements or Elicit Requirements


Prototyping
Gammel ane
Pre-prod meeting


OWNERSHIP:
- CONTEXT DEPENDENT:
*DELIVERY PROJECT
VENDOR "OWNS RISK"
VS
*DEVELOPMENT PROJECT
SHARED RISK
NEED → CUSTOMER
SOLUTION → VENDOR
- WELL DEFINED BOUNDARIES ARE IMPORTANT!
INTERFACES:
- INTERNAL ↔ INTERNAL
- INTERNAL ↔ EXTERNAL
- EXTERNAL ↔ EXTERNAL
- BUSINESS SIZE MATTERS!
↳ FORMALIZM


Full Supplier Resp.
STANDARD DELIVERY VS TAILORING
Shared Resp.
SUPPLIER KNOW BEST PRACTICE
CUSTOMER INVOLVMENT CAN LIMIT
WHAT IS CUSTOMER END GOAL
FIND SOLUTION
TECHNICAL FEASBILITY
UNDERSTAND NEED
INTERFACES
Short Dev. Sprint
Sidetracks can get fixed quick
WORKSHOP
VISUALIZE
LESS COMPLEX PROJECTS?
MODELS

Do you have examples of this interface Between Aquirer and supplier?
How do they cope with overlap?
traceability
communication
Documentation
Transparency
Visualization
workshops
Early
Early V-V
How much ownership do you want suppliers to take?
(Responsibility, Pro-activeness)
Partnership
update us!
Feedback
no yesmen
SPEAK UP
'No'
Balanse?
ASK QUESTIONS
CRITICAL THINKING
Long life relation
understand Needs
Trust
NEW TECHNOLOGY DEVELOPMENT
- IP/NDA (PROTECTION)
TRUST
① Detail oriented 'controlling' (OEM)
② "IP" req. definition
OEM versus Supplier
Suplier versus Sub-Supliers
want that they understand system
Knowledge transfer
design perfect product
time dependent life cycle dependant
OEM 1
OEM 2
we/supplier 1
supplier 2

Gerrit's Conclusion(s)

Ownership of all parties in the value chain is essential. **Ownership** implies responsibility and proactiveness. The asymmetric relation between acquirer and suppliers often triggers a reduction in ownership: "We do what you ask us" rather than "We do what fits the needs". This pattern reinforces itself over time.

A more gradual process of tendering helps with **early verification and validation** of the design and specification. Challenge is to fulfil regulations for **a level playing field**, while building a relation with sufficient overlap between acquisition and supplier. And a challenge is the **trust** and managing **confidentiality** and **sensitivity** of some knowledge.

Acquisition organizations (and supplier organizations internally) have to manage more **knowledge transitions (filters)**, e.g. from actual users (maintenance, operators) to acquisition staff. Each transition is a risk for definition and validation.