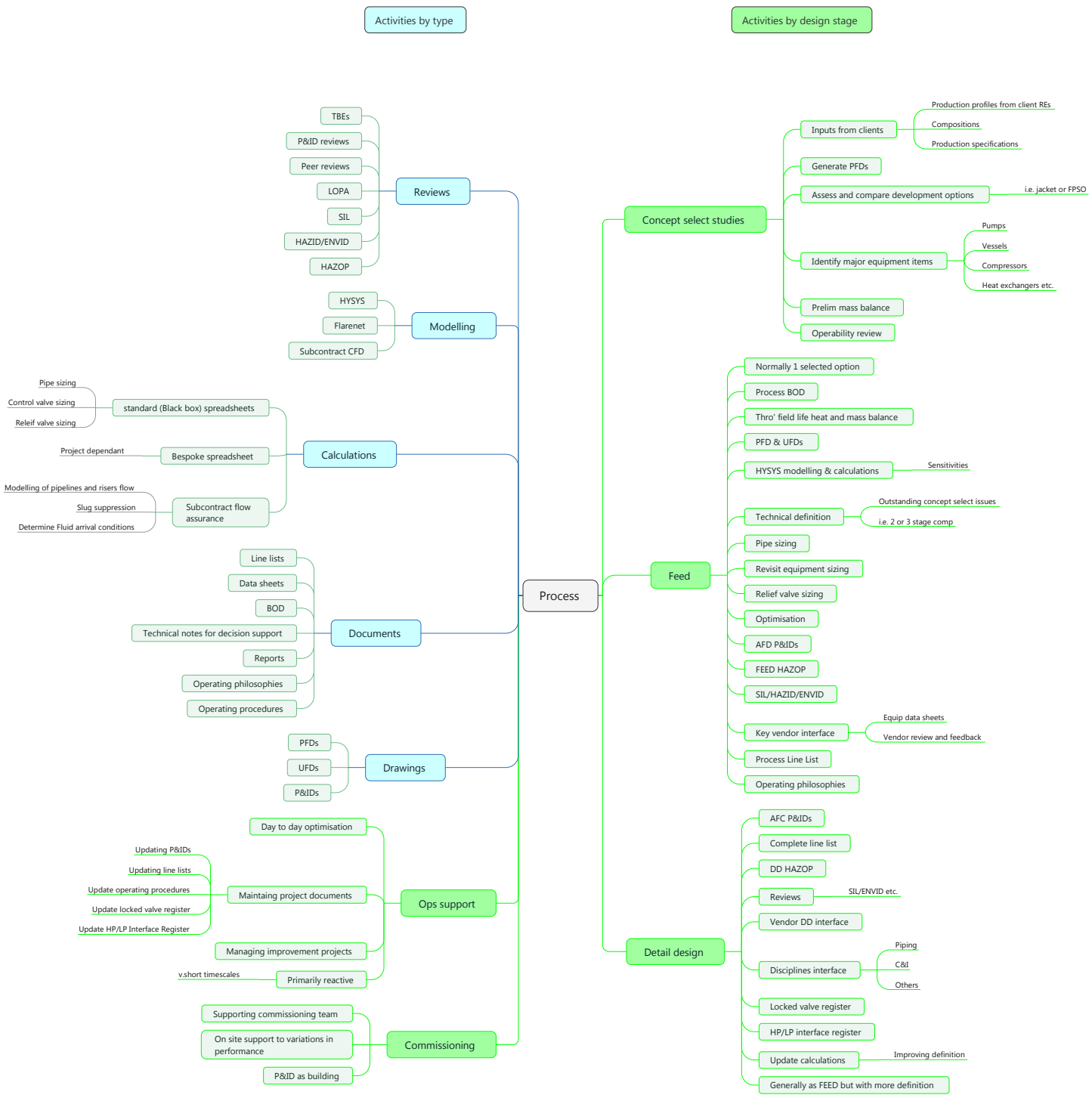
Activities by type
Activities by design stage
Process
Reviews
TBEs
P&ID reviews
Peer reviews
LOPA
SIL
HAZID/ENVID
HAZOP
Modelling
HYSYS
Flarenet
Subcontract CFD
Calculations
standard (Black box) spreadsheets
Pipe sizing
Control valve sizing
Releif valve sizing
Bespoke spreadsheet
Project dependant
Subcontract flow assurance
Modelling of pipelines and risers flow
Slug suppression
Determine Fluid arrival conditions
Documents
Line lists
Data sheets
BOD
Technical notes for decision support
Reports
Operating philosophies
Operating procedures
Drawings
PFDs
UFDs
P&IDs
Ops support
Day to day optimisation
Maintaing project documents
Updating P&IDs
Updating line lists
Update operating procedures
Update locked valve register
Update HP/LP Interface Register
Managing improvement projects
Primarily reactive
v.short timescales
Commissioning
Supporting commissioning team
On site support to variations in performance
P&ID as building
Concept select studies
Inputs from clients
Production profiles from client REs
Compositions
Production specifications
Generate PFDs
Assess and compare development options
i.e. jacket or FPSO
Identify major equipment items
Pumps
Vessels
Compressors
Heat exchangers etc.
Prelim mass balance
Operability review
Feed
Normally 1 selected option
Process BOD
Thro' field life heat and mass balance
PFD & UFDs
HYSYS modelling & calculations
Sensitivities
Technical definition
Outstanding concept select issues
i.e. 2 or 3 stage comp
Pipe sizing
Revisit equipment sizing
Relief valve sizing
Optimisation
AFD P&IDs
FEED HAZOP
SIL/HAZID/ENVID
Key vendor interface
Equip data sheets
Vendor review and feedback
Process Line List
Operating philosophies
Detail design
AFC P&IDs
Complete line list
DD HAZOP
Reviews
SIL/ENVID etc.
Vendor DD interface
Disciplines interface
Piping
C&I
Others
Locked valve register
HP/LP interface register
Update calculations
Improving definition
Generally as FEED but with more definition