

# Guide-Shielding Optimisation Workshop

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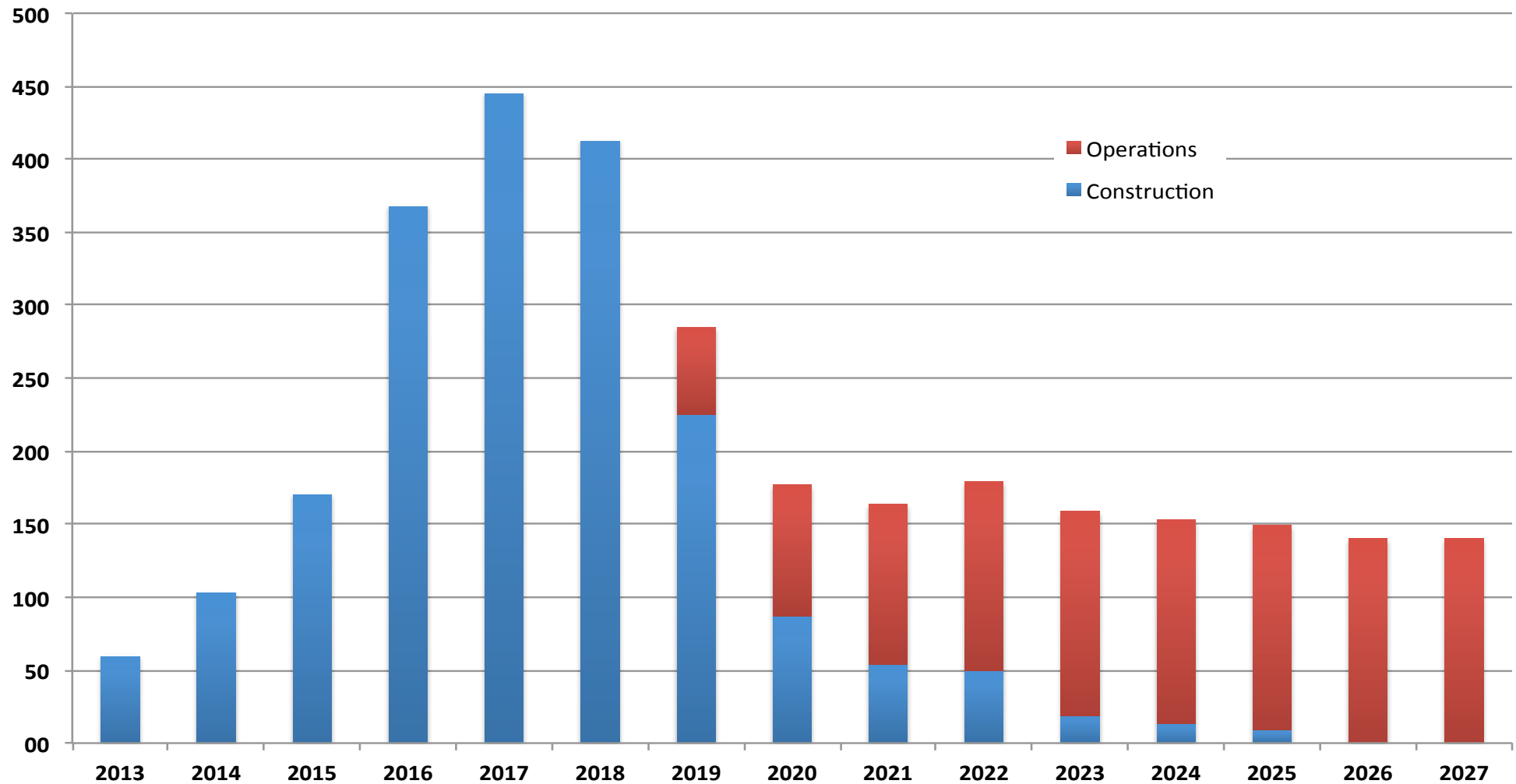
CPH Hilton, 12<sup>th</sup> May 2016

# ESS Construction Progress



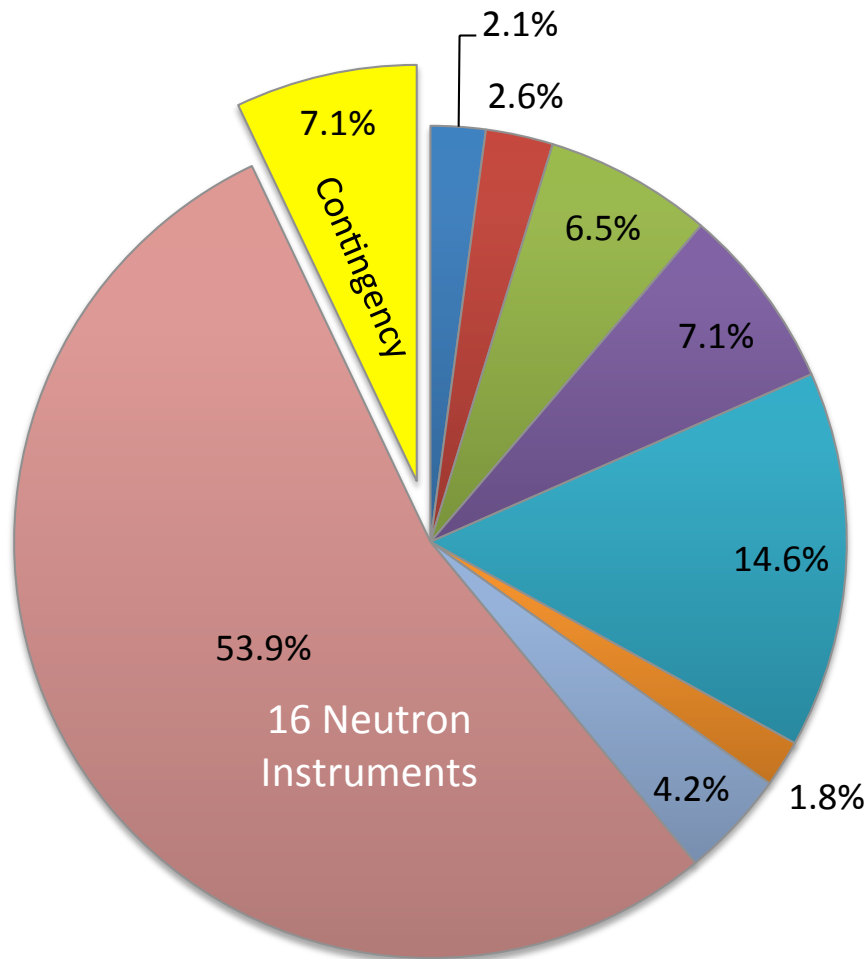
# ESS Budget Planning

Million Euro



# Neutron Scattering Systems Budget

**NSS Budget March 2016 : 350M€**



- Directorate Mgmt
- Instrument Concepts
- Science Support Systems
- Data Mgmt (DMSC)
- Instrument Technologies
- Instrument Integration Mgmt
- Neutron Guide Bunker
- Neutron Beam Instruments
- NSS Contingency

## Notes

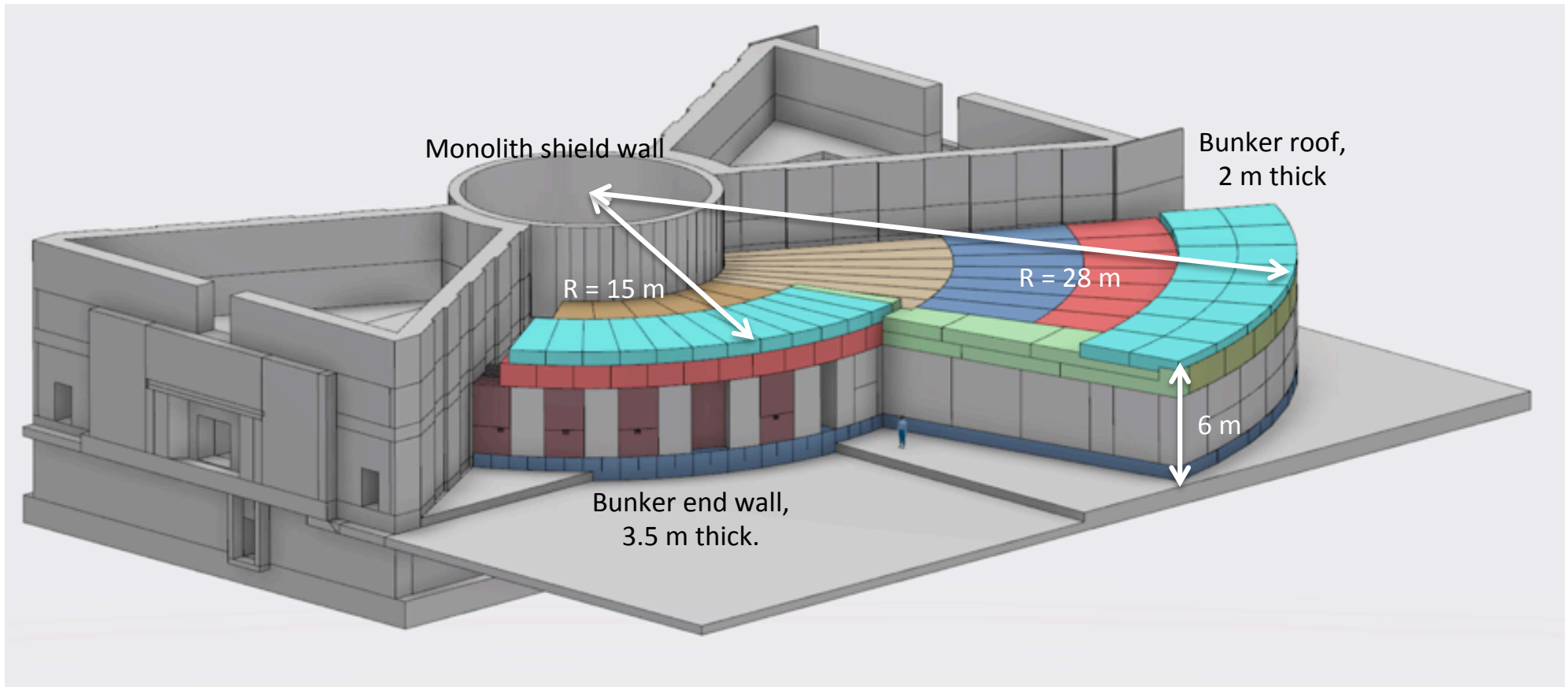
- NSS needs contingency > 10 % of cost to complete (over instrument contingencies)
- Pressure to increase Neutron instrument component
- NSS budget to be resolved in 2016

# Status of Neutron Scattering Systems



- moved from instrument selection to construction
  - 15 instruments in construction
- all major in-kind partners now actively participating
- STAPs have been restructured
- beamport allocations made
- licensing application submitted
  - first step of process towards full operational license
- finalising key technical components
  - common shielding bunker
  - monolith beam extraction inserts
  - light shutters
  - civil engineering
- ramp-up of planning for operations
- Andreas Schreyer has replaced Dimitri Argyriou as Science Director
- John Womersley will replace Jim Yeck as Director General in November

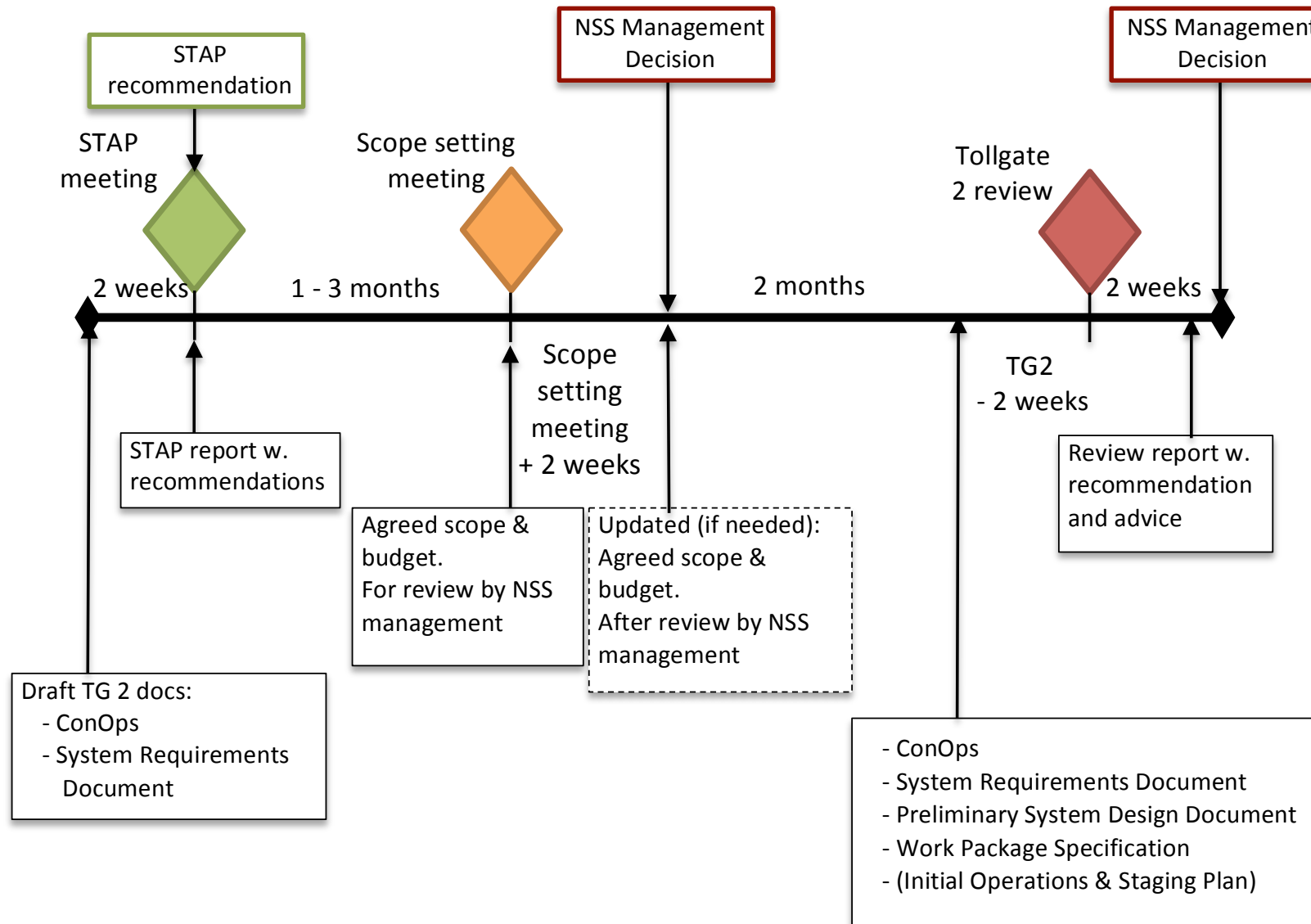
# Common Shielding Bunker



# Instrument Budgets

- 16-instrument budget: 188.9M€
  - sum of proposal budgets: 250M€
- day one scope < full scope
- increase budget per instrument?
  - cost savings in other parts of NSS: 1M€/instrument = 20% cut
  - (day one instruments need adequate sample environment, labs, software, detectors, etc.)
  - fewer instruments?
- minimise shielding cost
- day one version must allow early scientific success
- funding for upgrades will be included in initial operations budget

# TG2 Summary





# Scope-Setting Meeting



- Prepare costing information for up to 3 instrument configurations
  - 1: within cost category (9/12/15M€) minus 10% contingency
  - 2: configuration 2 (optional)
  - 3: configuration 3 (optional)
- For each configuration, present:
  - degree of achieving requirements and impact on science case
  - upgradeability through staging plan
- At end of meeting: determine minimum scope & budget
- Revisit after all scope-setting meetings

| 2016-17  | May  | Jun     | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr |
|----------|------|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LOKI     | 10/5 |         |     |     |     |     |     |     |     |     |     |     |
| SKADI    | 10/5 | 20      |     |     |     |     |     |     |     |     |     |     |
| ESTIA    |      | 14-15/6 | 20  |     |     |     |     |     |     |     |     |     |
| FREIA    |      | 14-15/6 |     |     |     |     |     |     |     |     |     |     |
| NMX      |      |         |     |     |     |     |     |     |     |     |     |     |
| MAGIC    |      | 22-23/6 |     |     |     |     |     |     |     |     |     |     |
| HEIMDAL  |      | 22-23/6 |     |     |     |     |     |     |     |     |     |     |
| DREAM    |      | 17/6    |     |     |     |     |     |     |     |     |     |     |
| BEER     |      | 17/6    |     |     |     |     |     |     |     |     |     |     |
| ODIN     |      | 17/6    |     |     |     |     |     |     |     |     |     |     |
| C-SPEC   |      |         |     |     |     |     |     |     |     |     |     |     |
| BIFROST  |      |         |     |     |     |     |     |     |     |     |     |     |
| MIRACLES |      |         |     |     |     |     |     |     |     |     |     |     |
| T-REX    |      |         |     |     |     |     |     |     |     |     |     |     |
| VESPA    |      |         |     |     |     |     |     |     |     |     |     |     |

IKON11

ICB

SAC COUNCIL

 STAP

 scope-setting

 TG2

Thank You!

