



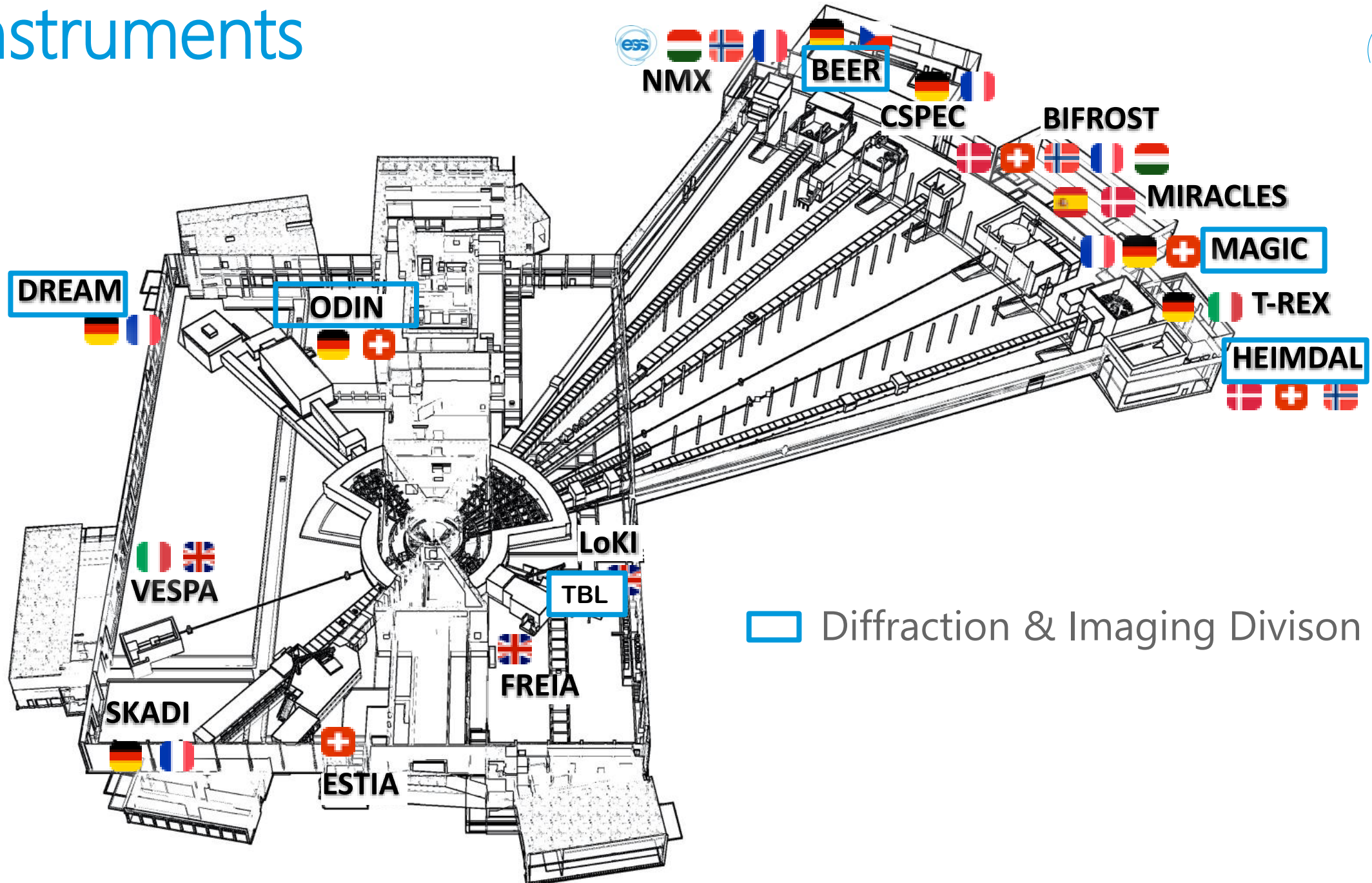
Instrument Safety Readiness Review for TBL

Mikhail Feygenson^{1,2}

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² Adjunct Associate Professor, Department of Materials Science and Engineering, Uppsala University

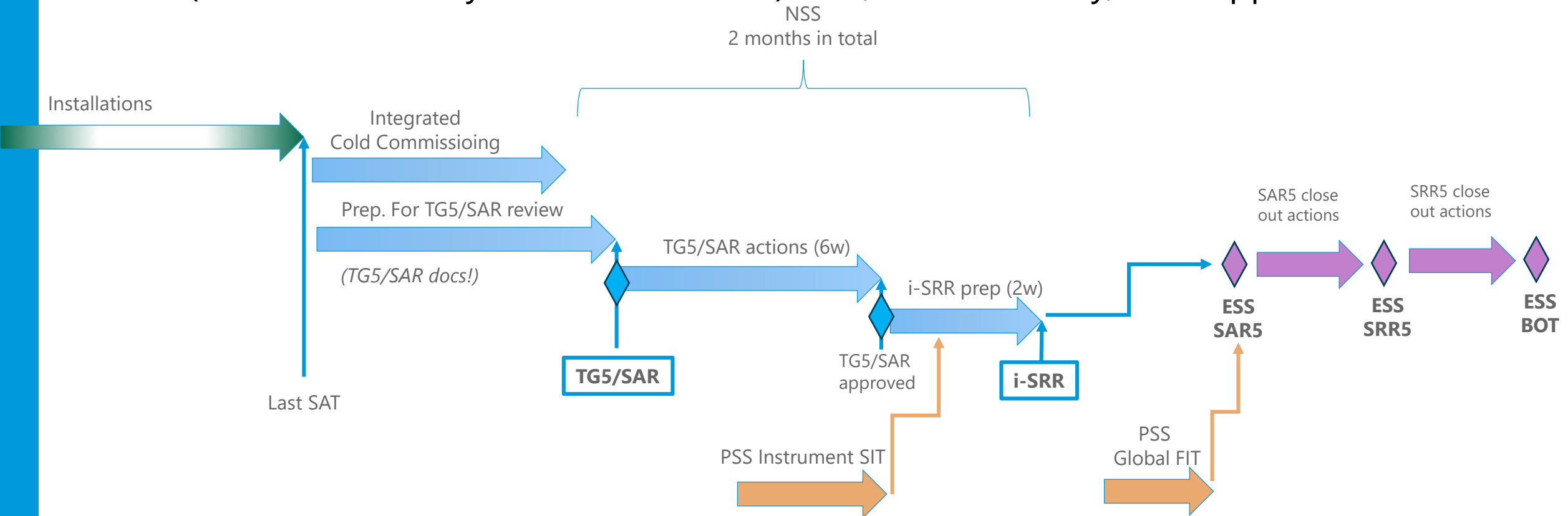
Instruments



Road to Science: NSS high-level schedule



- **SAR** (System Acceptance Review): Are all components installed properly?
Is the instrument ready for Hot Commissioning?
- **iSRR** (Instrument Safety Readiness Review): PSS, Motion Safety, Fire suppression and etc.



Remarks



1. This is the first iSRR for the instrument
2. It is the first instrument meeting with external peers
3. Agenda was altered to reflect shortcomings of SAR meeting (CIDL)
4. There will be some repetition of information from SAR
5. Agenda for the meeting was aligned with ESS global SRR and on input from TH
6. Aim is to combine SAR and iSRR in one meeting
7. The template and approval chain were changed since TBL SAR meeting
8. Aim for today to prepare the report for CHESS release

Charge for Review Committee



1. Are the safety systems of the instrument installed and operational?
2. Are the safety systems of the instrument adequately documented?
3. Is all the shielding on the instrument installed and correctly configured?
4. Are the safety systems of the instrument ready for hot commissioning and operations?
5. Are the necessary operations procedures in place?
6. Complete iSRR/SAR report



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Getting ready for Beam on Target

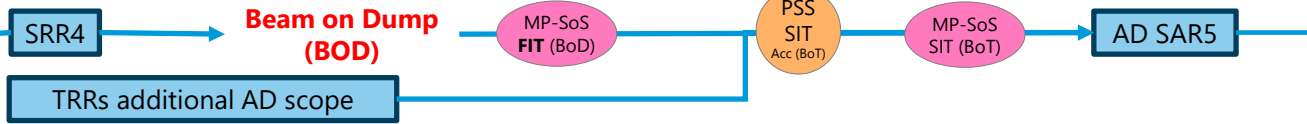
PSS
SIT
Acc (BoD)

PSS
FIT
Acc (BoD)

+ ACC ODHDS

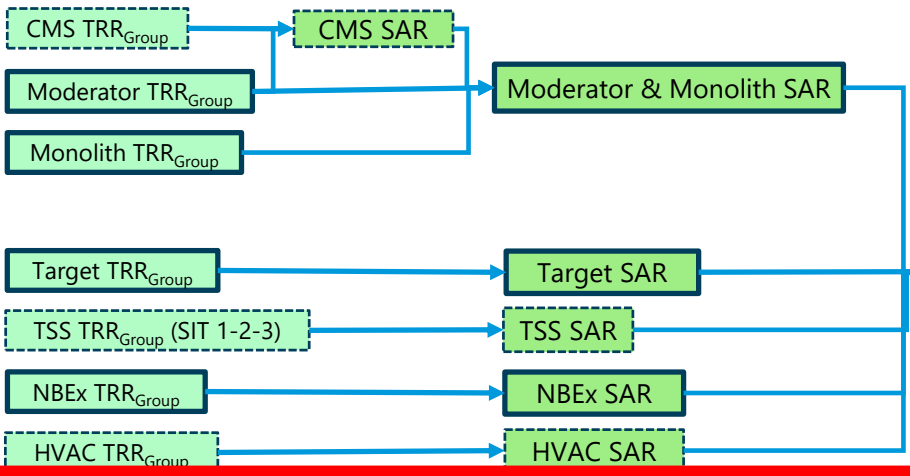
MP-SoS
SIT (BoD)

MP-SoS
FIT (BoD)



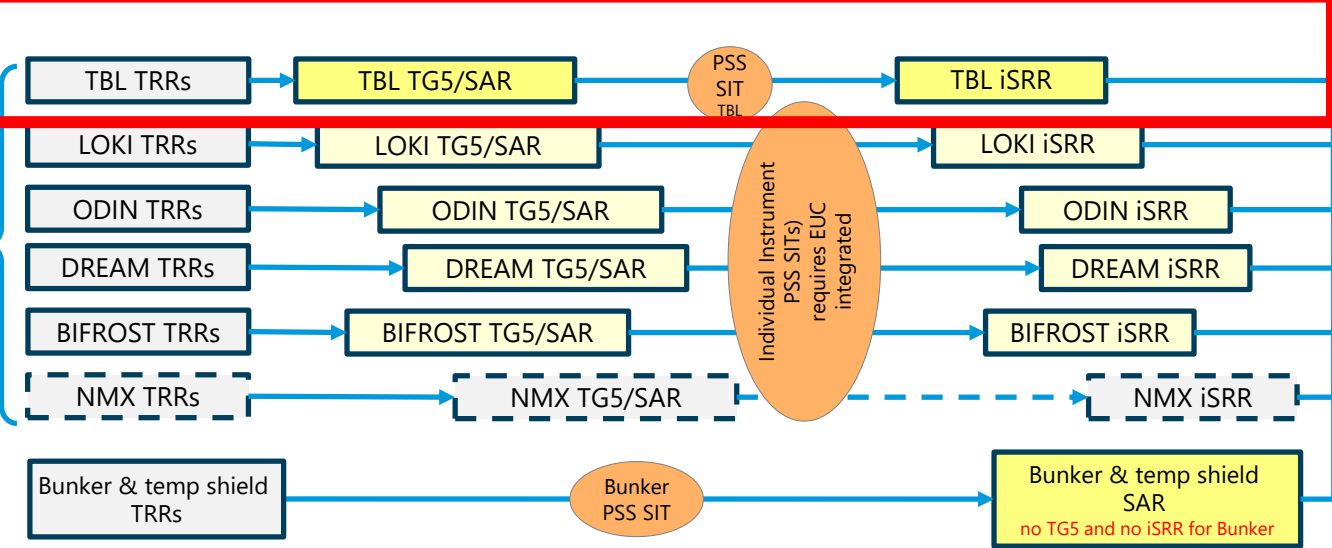
TRRs additional AD scope

Target individual system TRRs



Individual system TRRs
already ongoing or even completed

Tranche 1



Individual Instrument
PSS SITs
requires EUC
integrated

- FIT Final Integration Test
- iSRR Instrument SRR (including safety systems)
- SAR System Acceptance Review
- SIT Site Integration Test
- SRR Safety Readiness Review
- TG5 Toll Gate 5
- TRR Test Readiness Review

1 global
PSS FIT

MP-SoS
FIT
(BoT)



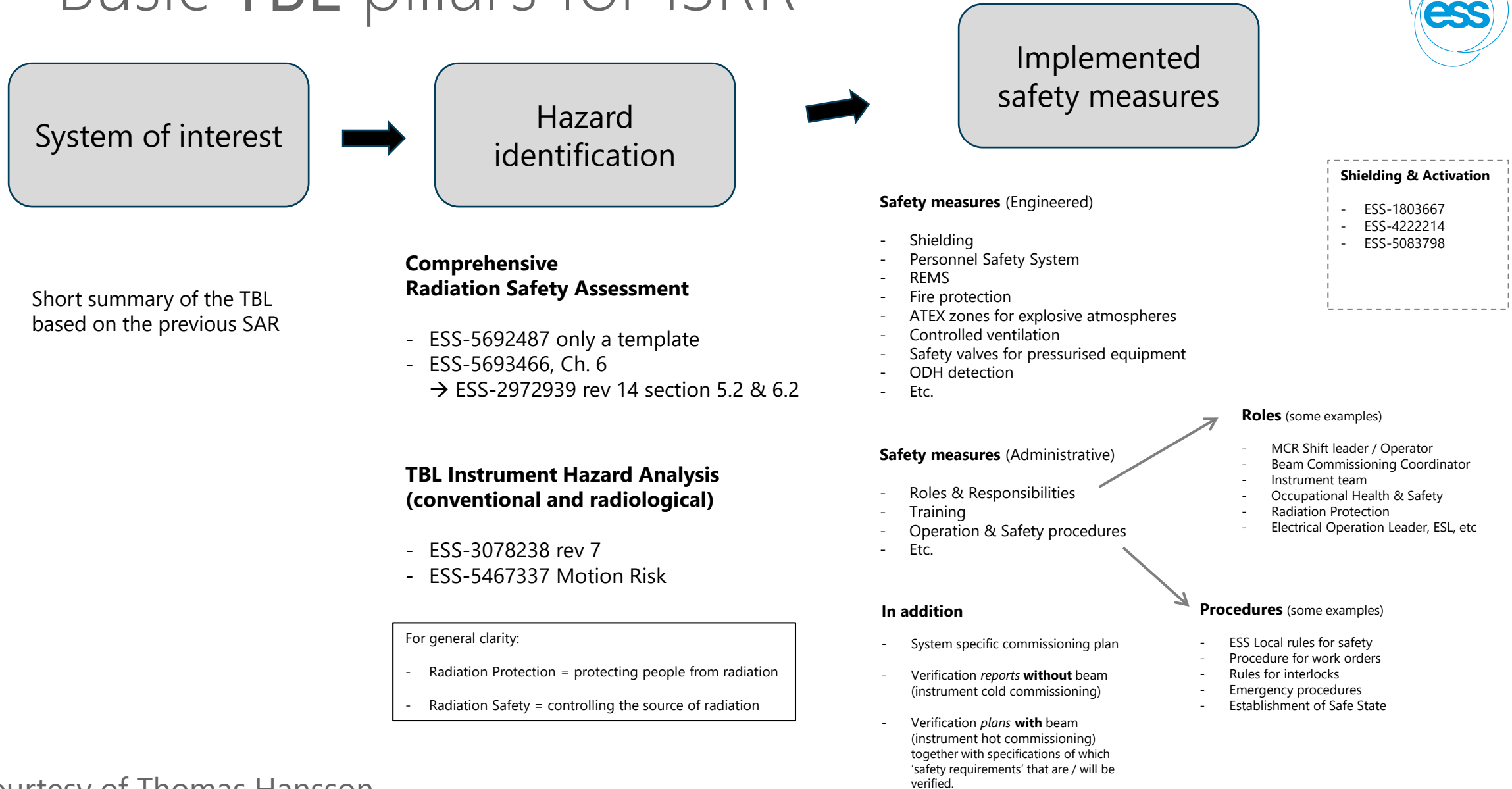
(*) Short period with
'Beam Commissioning to Dump'
is planned after RBoT
(but before BoT)

Beam on Target
(BOT)

MP-SoS
FIT
(BoT)



Basic TBL pillars for iSRR



Charge for Review Committee



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2. Are the safety systems of the instrument adequately documented?
3. Is all the shielding on the instrument installed and correctly configured?
4. Are the safety systems of the instrument ready for hot commissioning and operations?
5. Are the necessary operations procedures in place?
6. Complete iSRR/SAR report

Review Committee:



Mikhail Feyngenson (Chair)
Robert Connatser (Head of NSS Division)
Helen Boyer (OHS Representative)
Mattias Skafar (Quality Representative)
Günter Muhrer (Shielding Coordinator)
Giuseppe Aprigliano (NSS Engineering Representative)
Per Roos (RP Representative)
Sofie Ossowski (NSS Subproject Representative)
Kazim Raza Syed (Radiation Safety Representative)

Observers:

Lali Tchelidze (Head of Operations Division)	Ralf Trant (external)
Peter Rådahl (Chief Engineer /Technical Office Manager)	Michael Dressel(external)
Andreas Jansson (Facility Commissioning Coordinator)	
Annika Nordt (Protection Systems Group Leader, ICS)	
Thomas Hansson (Radiation Safety Representative)	

Remarks



1. It is the first iSRR meeting for an instrument evaluated
2. Agenda is based and adopted from previous SRR at ESS
3. Prior meetings with RP, OHS, Operation, MCR (thank you all!)
4. We evaluate safety aspects of readiness for the hot commissioning
5. We are not evaluating the operational readiness review for external users
6. List of reviewers was altered from SAR
7. In the future, we aim to combine SAR/iSRR in one review
8. Updated template already reflects SAR and iSRR questions

Rules

1. Only reviewers & observers are allowed to ask questions during the meeting (please, mute yourself on Zoom)
2. All others are welcome to ask questions during coffee breaks/lunch
3. Any feedback is welcome after the meeting
4. We are not discussing the technical readiness (subject of SAR)