

Layer Model for Quantum Computers

TR under voting from JTC22/WG3

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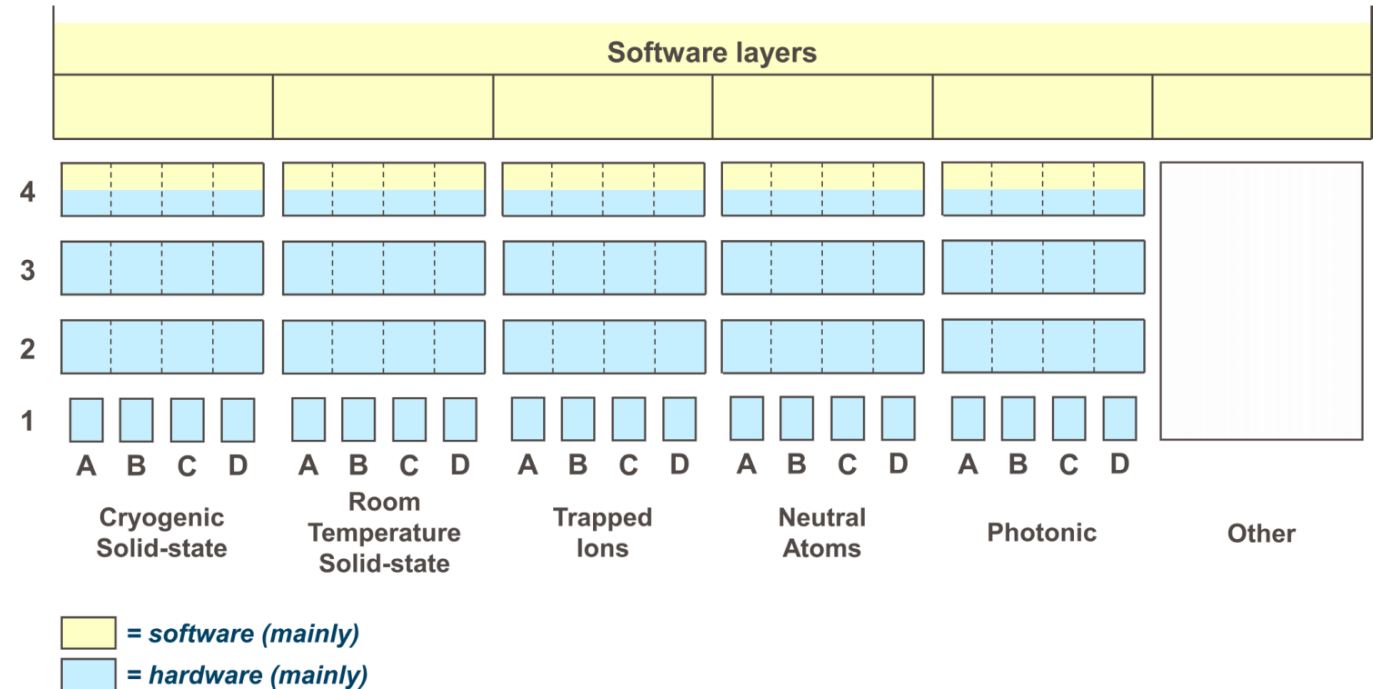
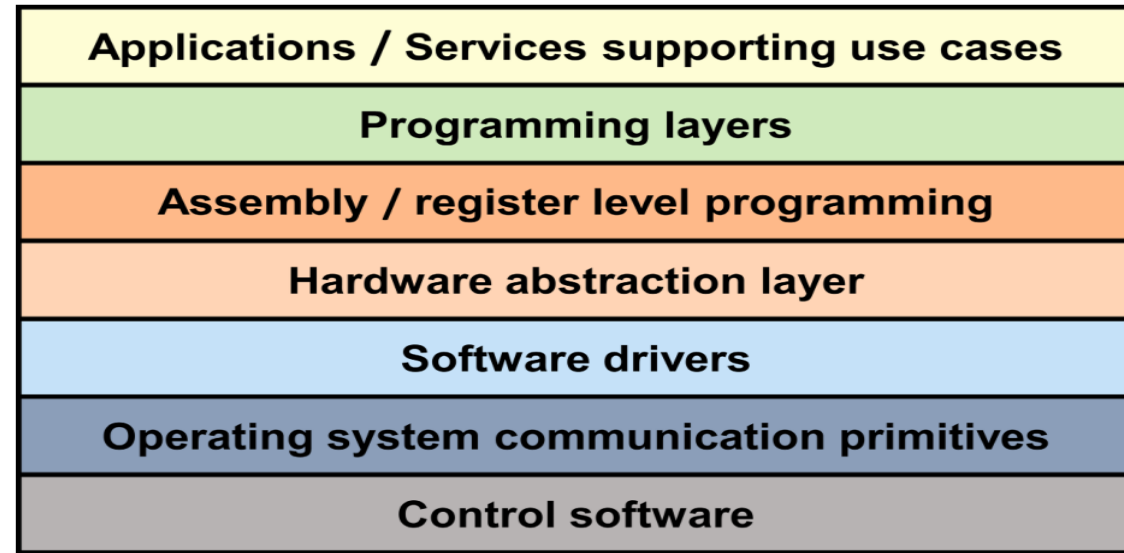
Delft Circuits

Hardware for quantum engineers

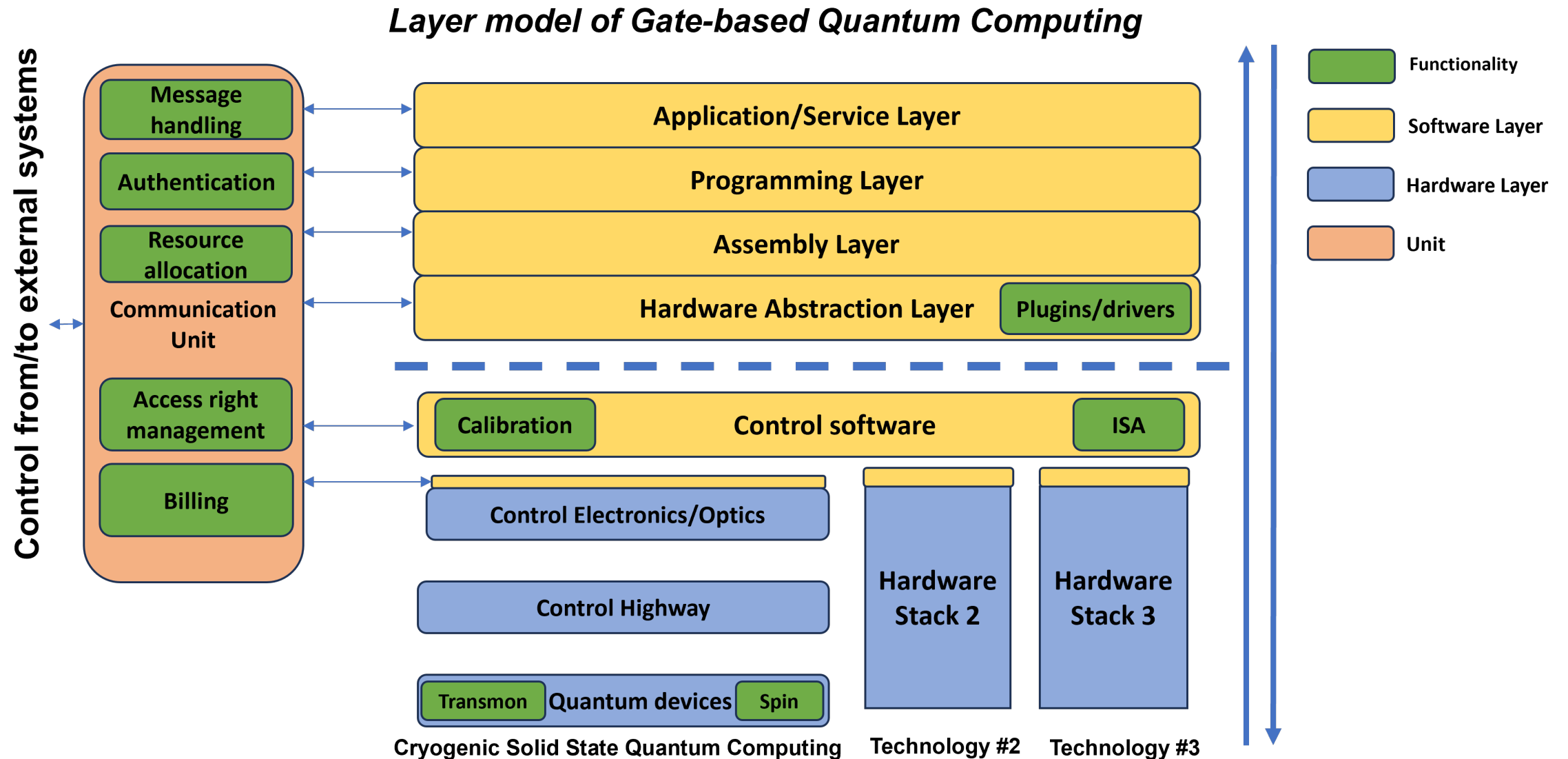
Old Model: results from Focus Group QC

Published in:

- EPJ Quantum Technology:
Towards European standards for QT
(March 2022)
- CEN-CENELEC:
Standardisation Roadmap on QT
(March 2023)

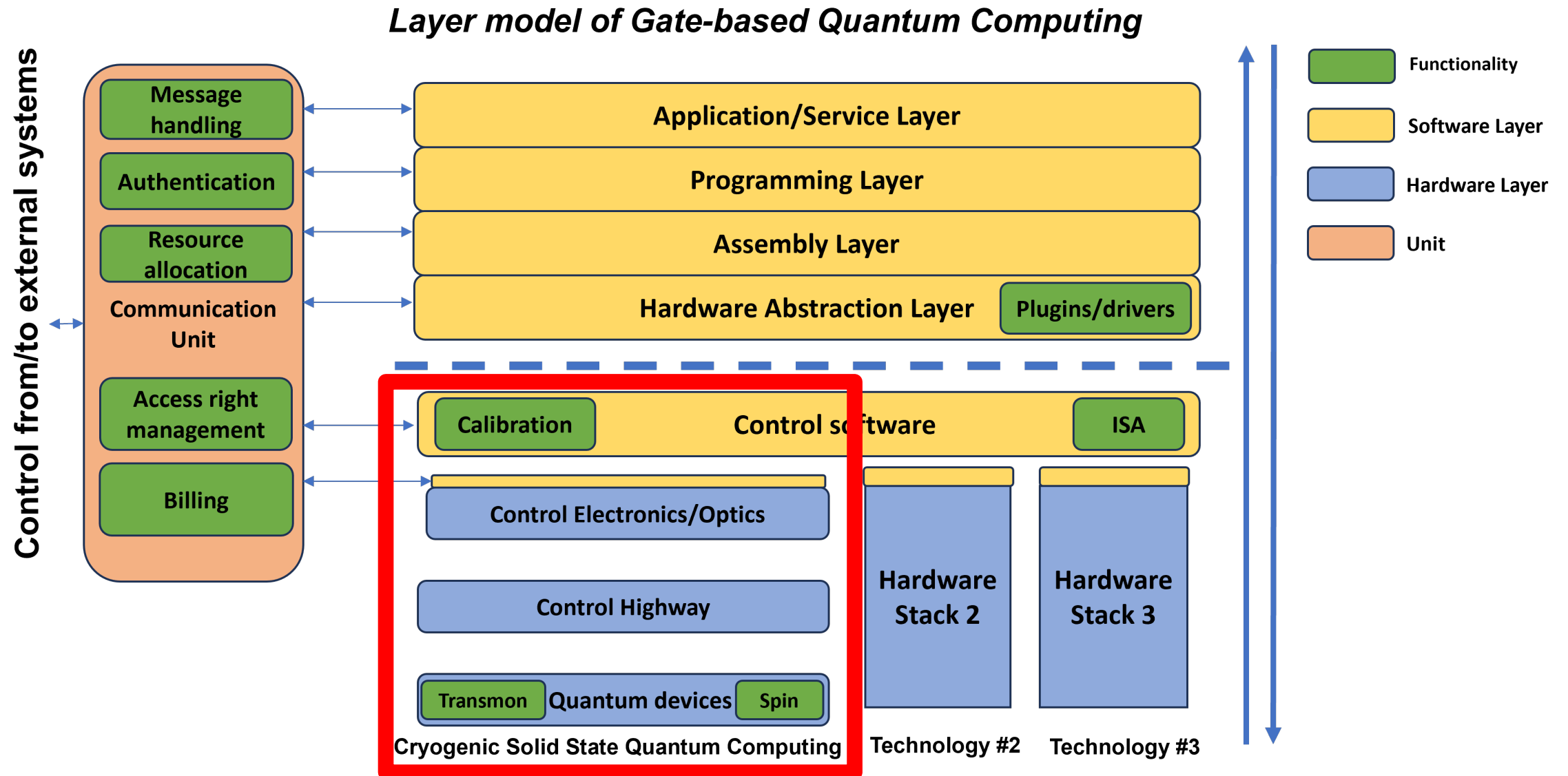


Present Model: results from JTC22/WG3



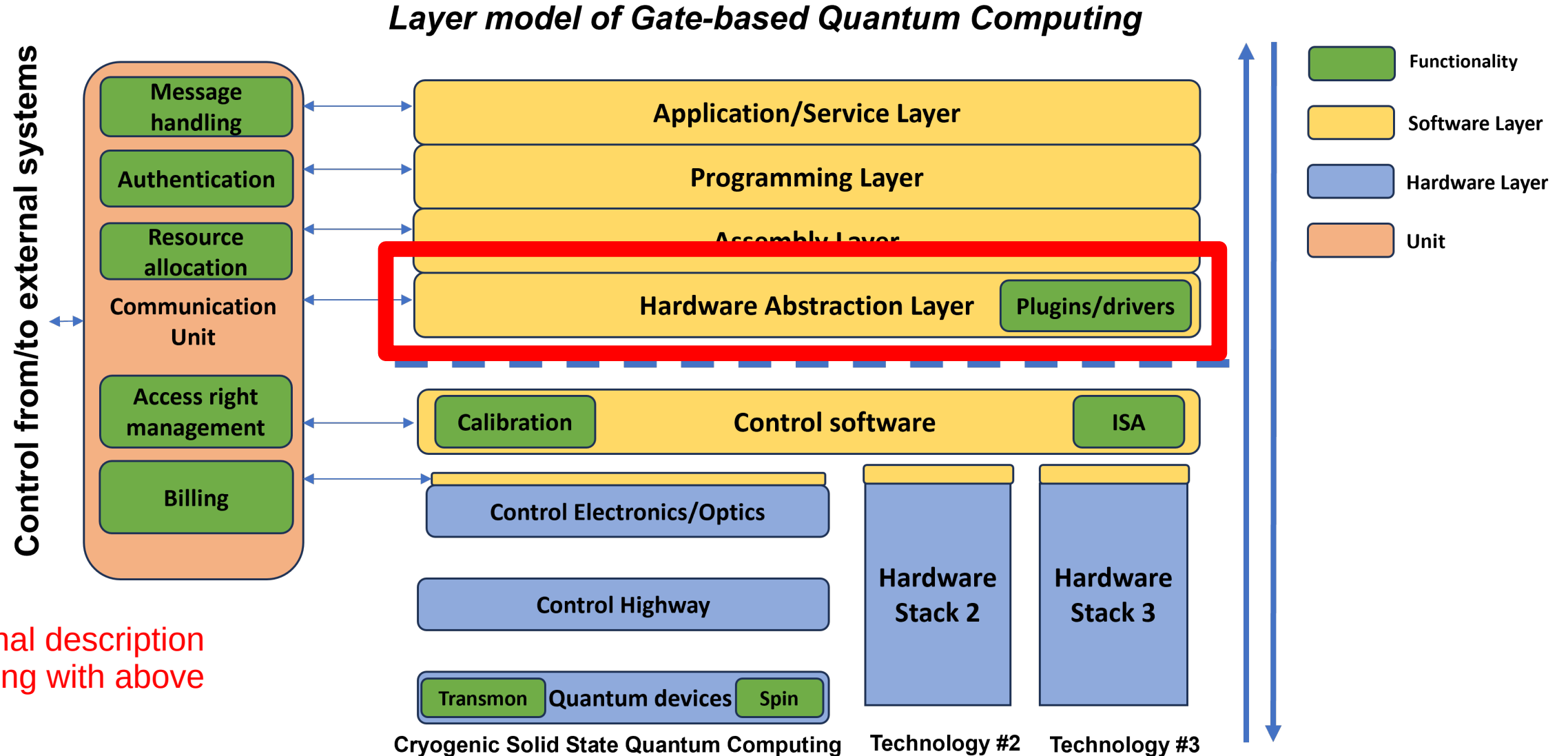
How to proceed after formal consensus?

#1: TR dedicated to: Cryogenic Solid State QC – work in progress



How to proceed after formal consensus?

#2: TR dedicated to: Hardware Abstraction Layer

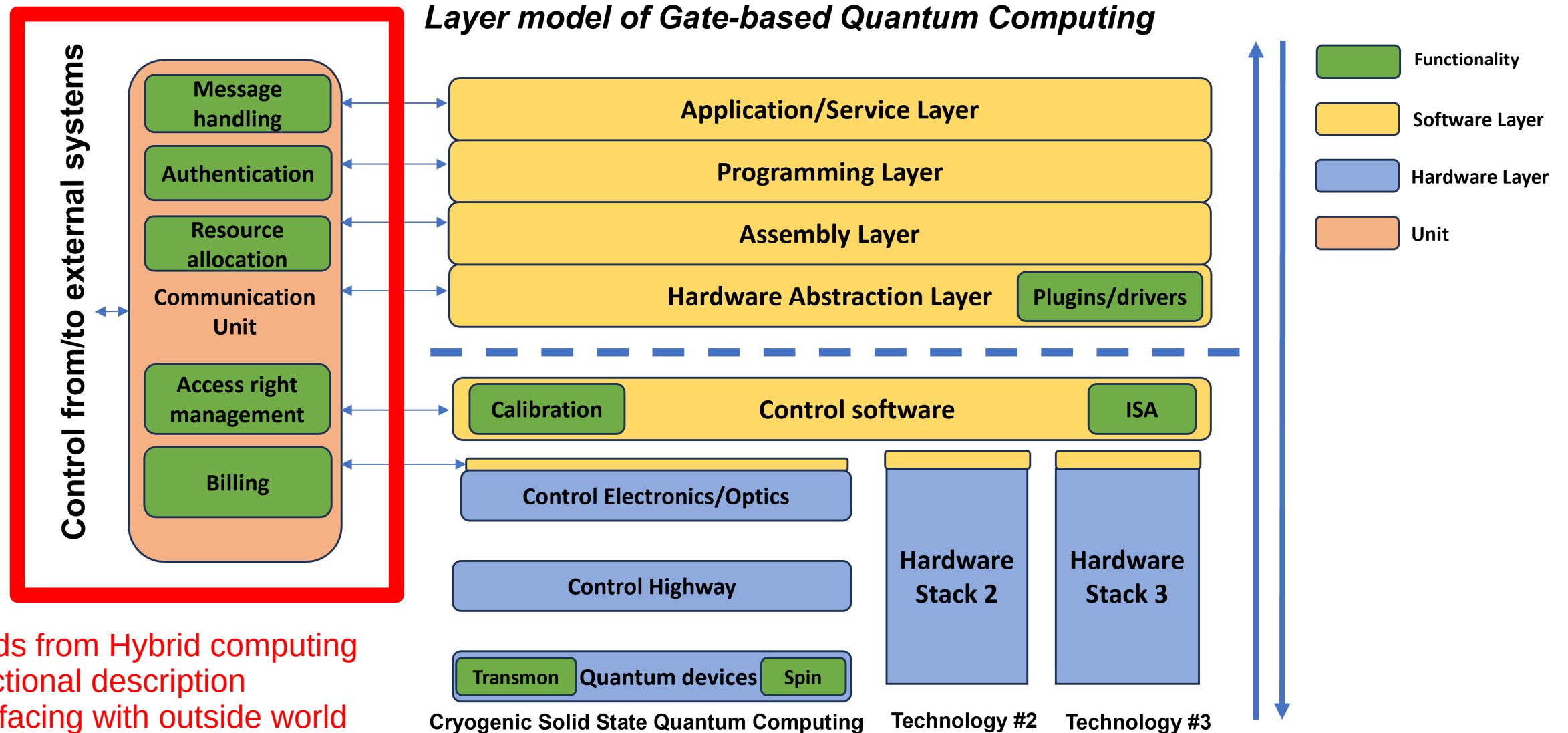


- Functional description
- Interfacing with above



How to proceed after formal consensus?

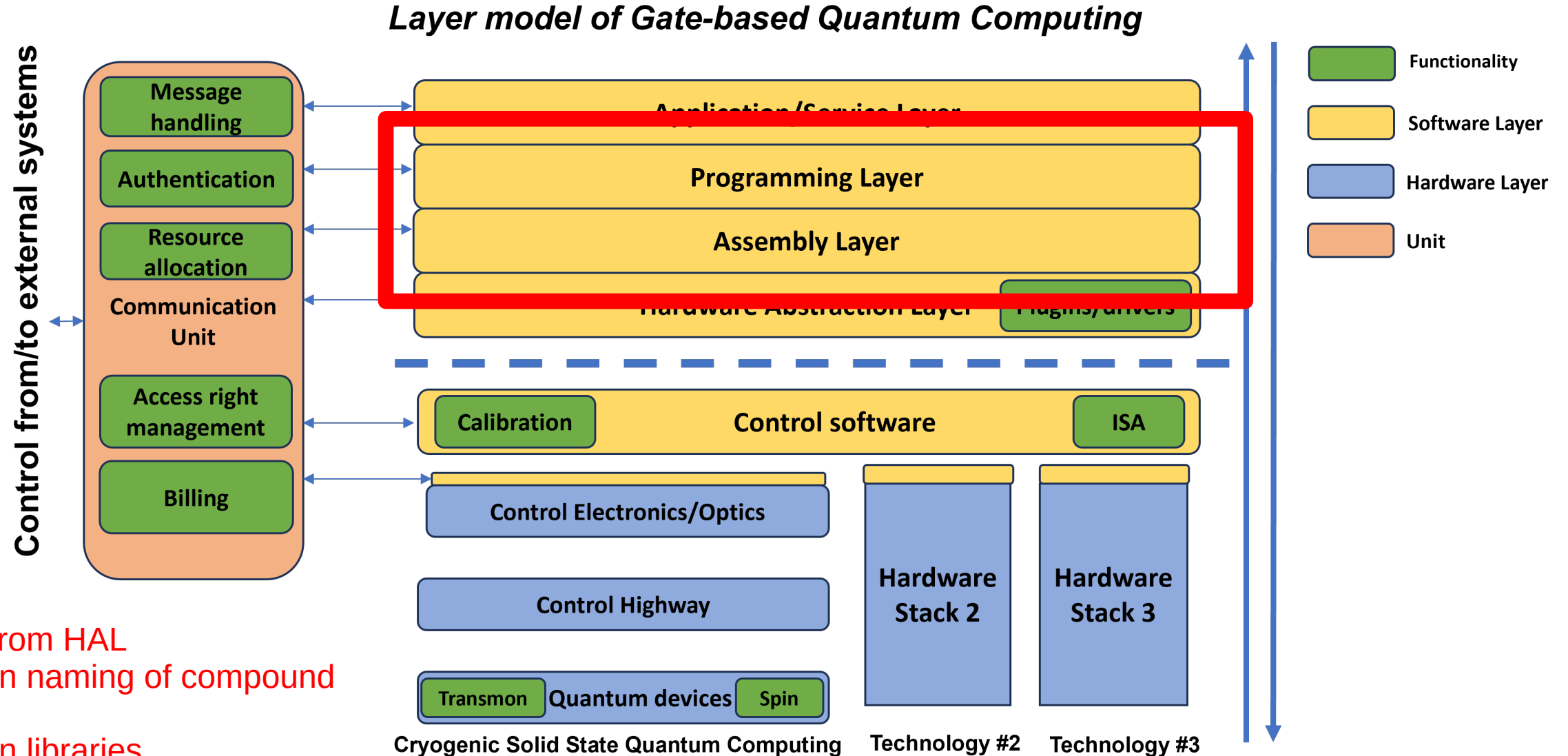
#3: TR dedicated to remote control of Quantum Computers



- Needs from Hybrid computing
- Functional description
- Interfacing with outside world

How to proceed after formal consensus?

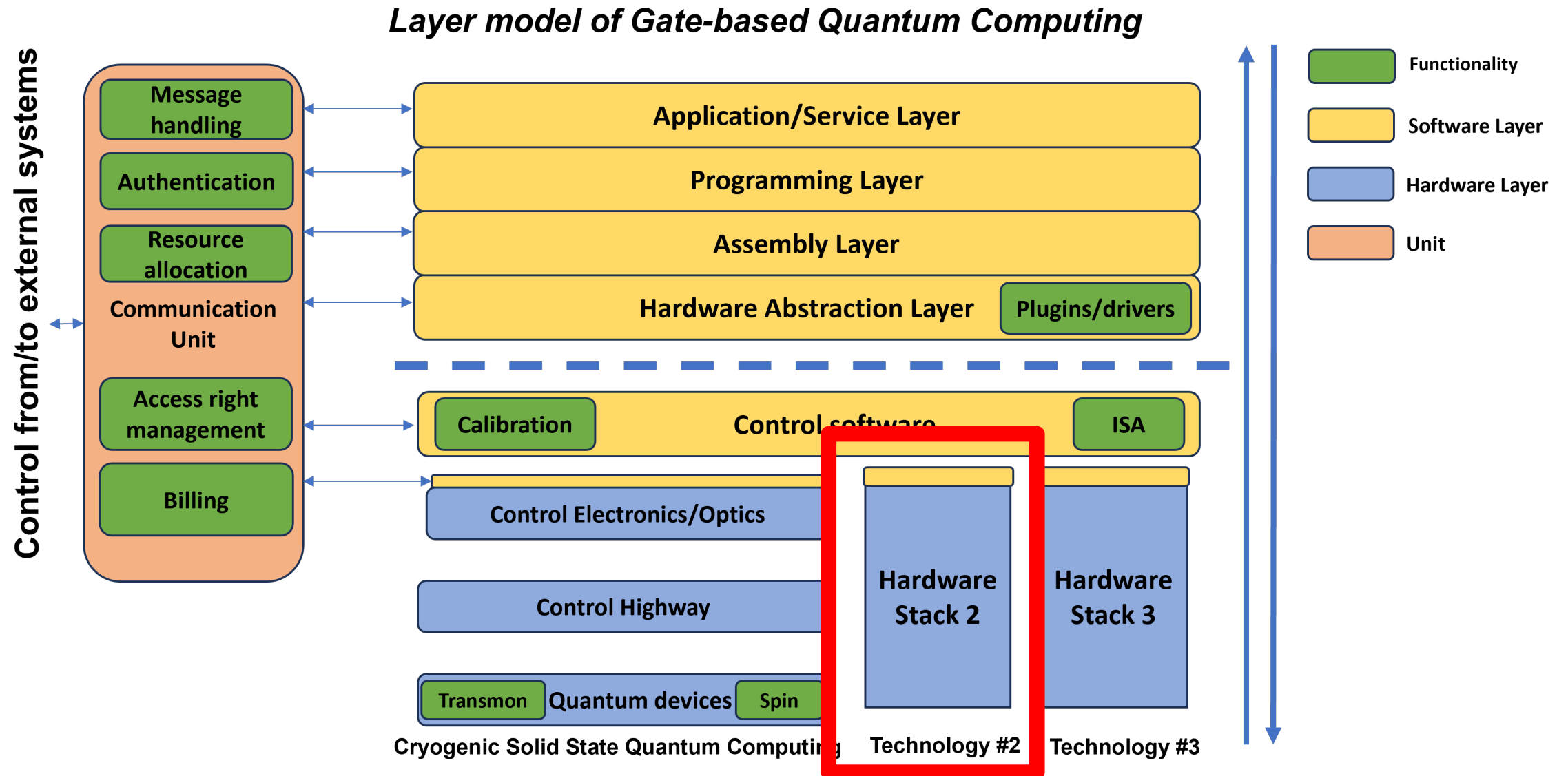
#4: TR dedicated to Assembly & Programming Layers



- Needs from HAL
- Common naming of compound gates
- Common libraries

How to proceed after formal consensus?

#5: Other technologies (Photonics?, Ion Traps? ...)



How to proceed after formal consensus?

#6: Overall TR upgrade/refinement on the Layer Model

