



FET Flagship on Quantum Technologies Governance

Board of Funders, 1 December 2017

Dr. Gustav Kalbe

Head of Unit

High Performance Computing and Quantum Technologies

DG CNECT, European Commission

Governance?

*Set of **structures** and **processes** to ensure a well-functioning and successful QT Flagship*

Main objectives

- Facilitate management & steering
- Ensure coordination & networking
- Organise communication & outreach

Governance - the **needs**

Decision making

- Discuss the **overall strategy** and the **progress** towards the QT Flagship goals

Strategic advice

- Prepare and propose updates of the **Strategic Research Agenda**
- Monitor and reports on the **progress in the SRA implementation**

Networking and coordination

- Coordination among R&I **projects**
- Alignment with **national QT programmes**
- Gathering & analysis of **performance data**
- Organise & support availability of **QT training offer**
- Maximises **communication & outreach**

Implementation

- **Execution** of R&I activities

Governance – QT-HLSC report

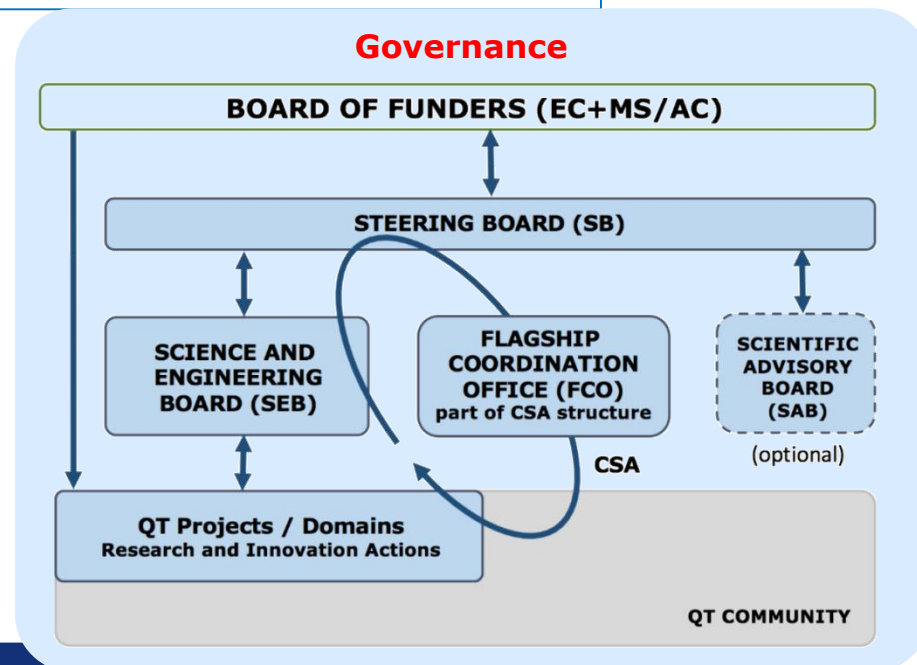


Quantum Technologies Flagship Final Report

High-Level
Steering
Committee
28 June 2017

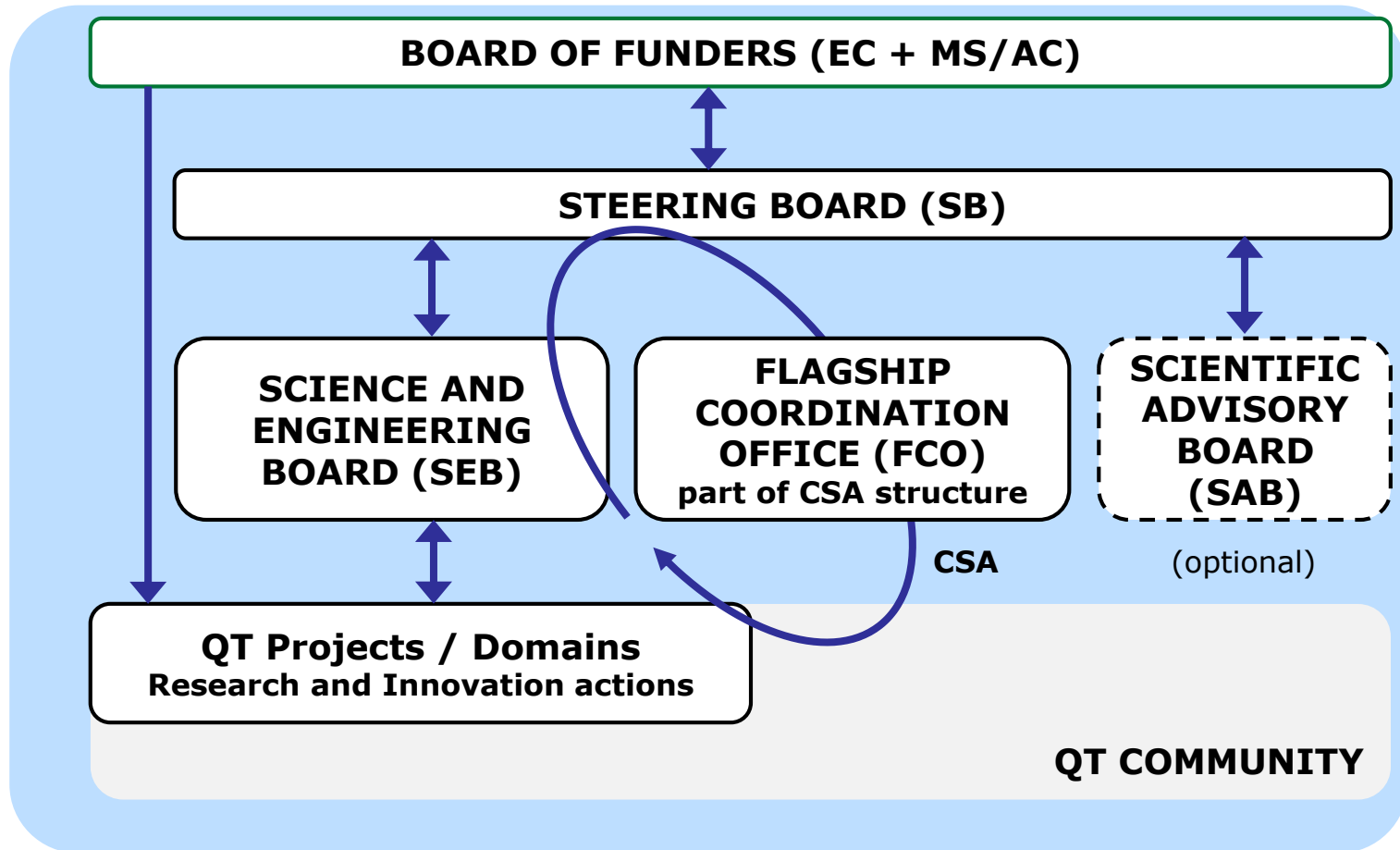
<http://tinyurl.com/qt-hlsc-report>

**Implementation, including
Key Performance indicators**



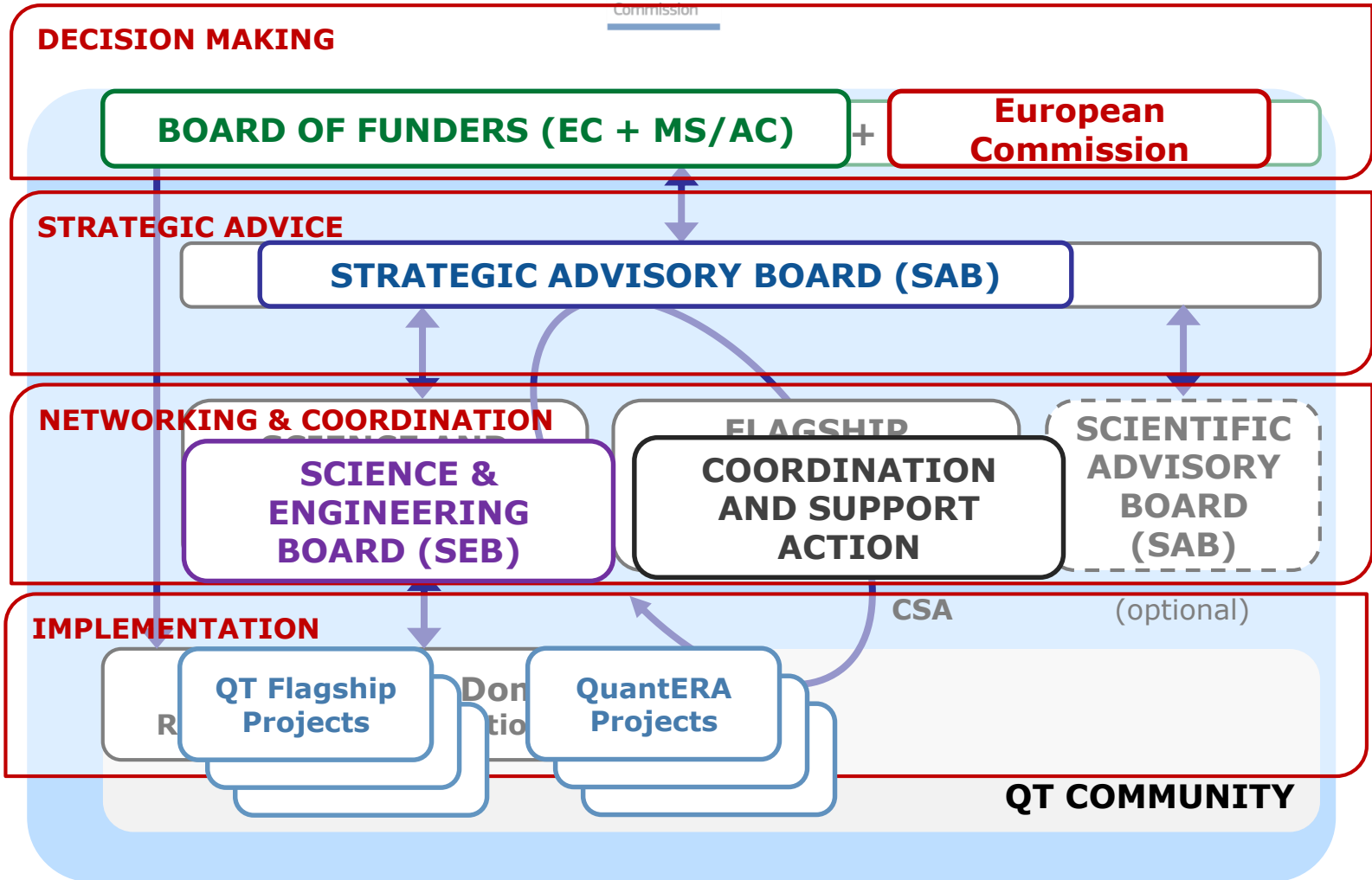
QT-HLSC

Governance proposal





European
Commission





European
Commission

DECISION MAKING

BOARD OF FUNDERS (EC + MS/AC)

**European
Commission**

STRATEGIC ADVICE

STRATEGIC ADVISORY BOARD (SAB)

NETWORKING & COORDINATION

**SCIENCE &
ENGINEERING
BOARD (SEB)**

**COORDINATION
AND SUPPORT
ACTION**

IMPLEMENTATION

**QT Flagship
Projects**

**QuantERA
Projects**

QT COMMUNITY

QT Flagship Governance



Ramp-up

Intelligence gathering

Decision making

Implementation

Advice

BOARD OF FUNDERS (EC + MS/AC)

European Commission

QT Flagship Projects

SCIENCE AND ENGINEERING BOARD

QuantERA Projects

QT FLAGSHIP STRATEGIC ADVISORY BOARD (SAB)

National activities,...

Stakeholders (QT community)

QT FLAGSHIP COORDINATION AND SUPPORT ACTION

Strategic level

*Decision making by
public authorities*

Board of Funders:

- Discussion forum
- Alignment of initiatives
- Overall follow-up

European Commission:

- Planning of financial support
- Project selection and funding decision
- Project follow-up

*Strategic advice by
quantum community*

Strategic Advisory Board:

- Monitors the progress of the Flagship towards its goals
- Proposes updates of Strategic Research Agenda
- Works with the EC and reports progress to the BoF
- Gets inputs from networking & coordination level (CSA, SEB)

QT Flagship Strategic Advisory Board

Composition:

- 6-8 academic members (including RTOs)
- 6-8 industrial members (including SMEs)
- from MS/AC
- appointed by the EC
- 1 chairperson + 1 vice-chair
- not involved in activities funded by the QT Flagship

Rules of procedure:

- Meeting up to 4x/year
- 2-year mandate

Transition from QT-HLSC:
~10 former QT-HLSC
members appointed with an
initial 1-year mandate

QT Flagship Science & Engineering Board

Composition:

- QT Flagship project coordinators
- Representatives of QuantERA projects

Tasks:

- **Coordination** of QT Flagship R&I activities
- Identify **collaboration opportunities**, joint developments, **sharing of infrastructures** among projects
- Interacts with the Strategic Advisory Board and reports to the EC

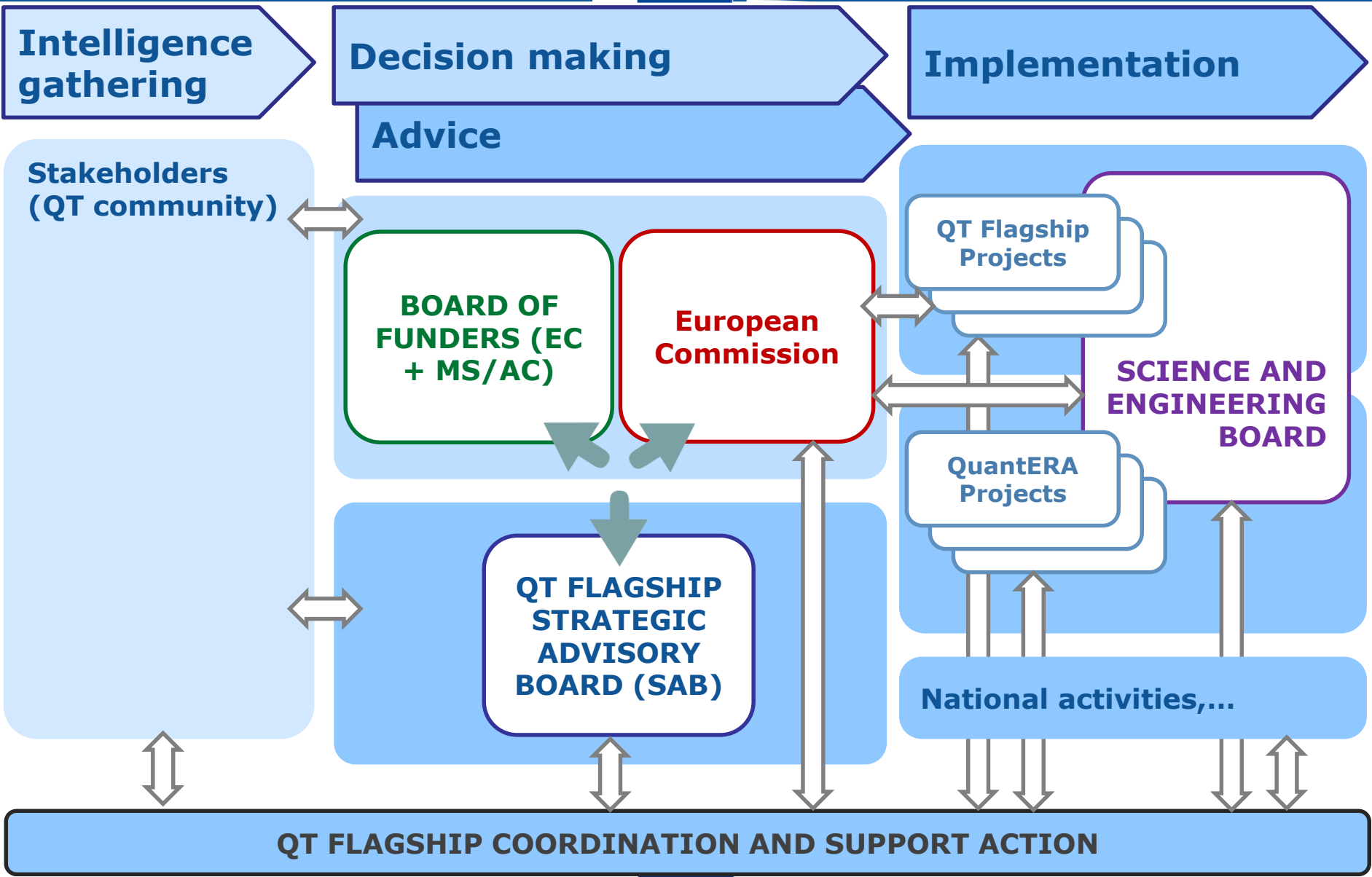
QT Flagship Coordination and Support Action

- Networking of **stakeholders**
- Liaison with **QT initiatives at national/regional level**
- Management of the **communication platform** (web portal,...)
- Management the **information repository** (databases,...)
- Organisation of **workshops, conferences**
- Organisation of the **benchmarking** of QT projects
- **Promotes, disseminates,** maximises outreach
- Facilitates **International cooperation**
- Collects **progress indicators**
- Identifies **education and training** offers/needs
- Identifies **standardisation** needs
- **Supports** the SEB and SAB

QT Flagship Governance

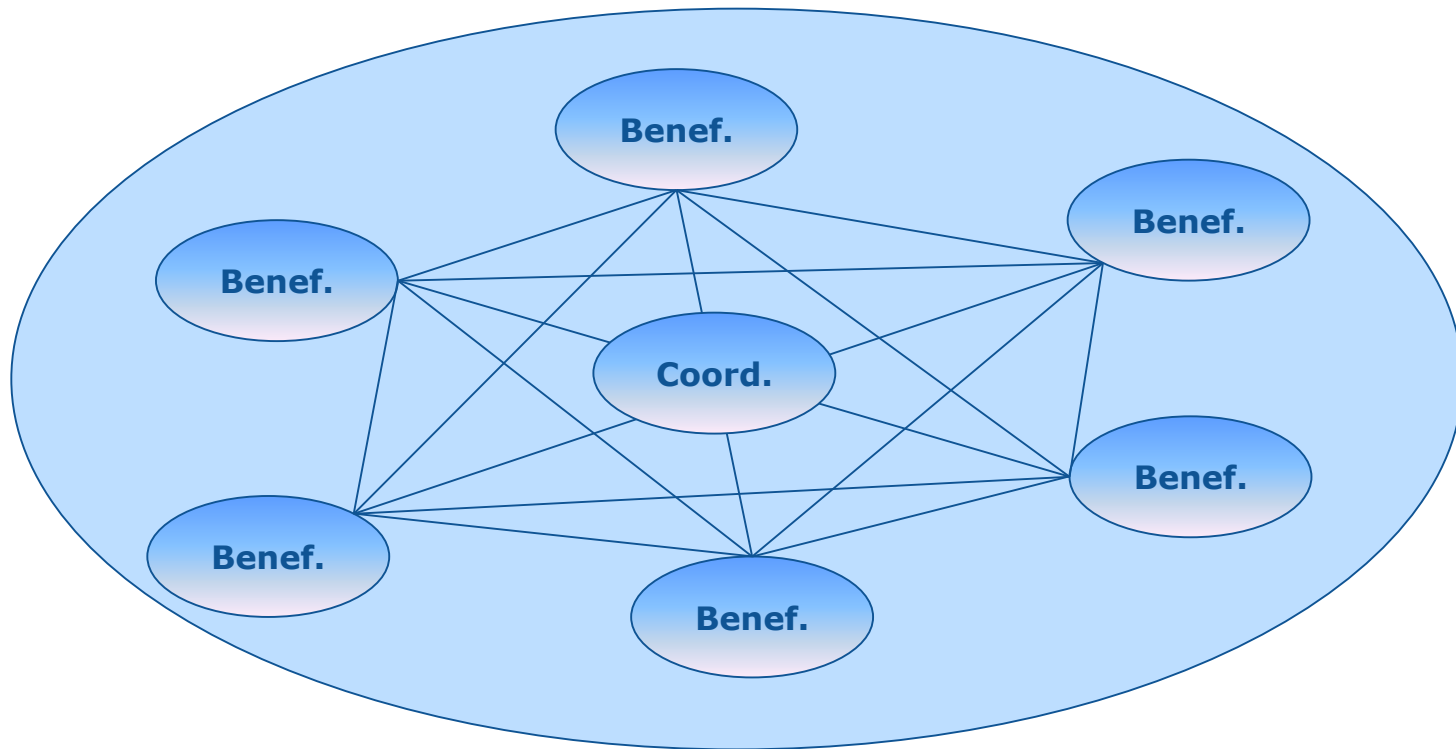


Ramp-up



Complementary grants

Project dimension

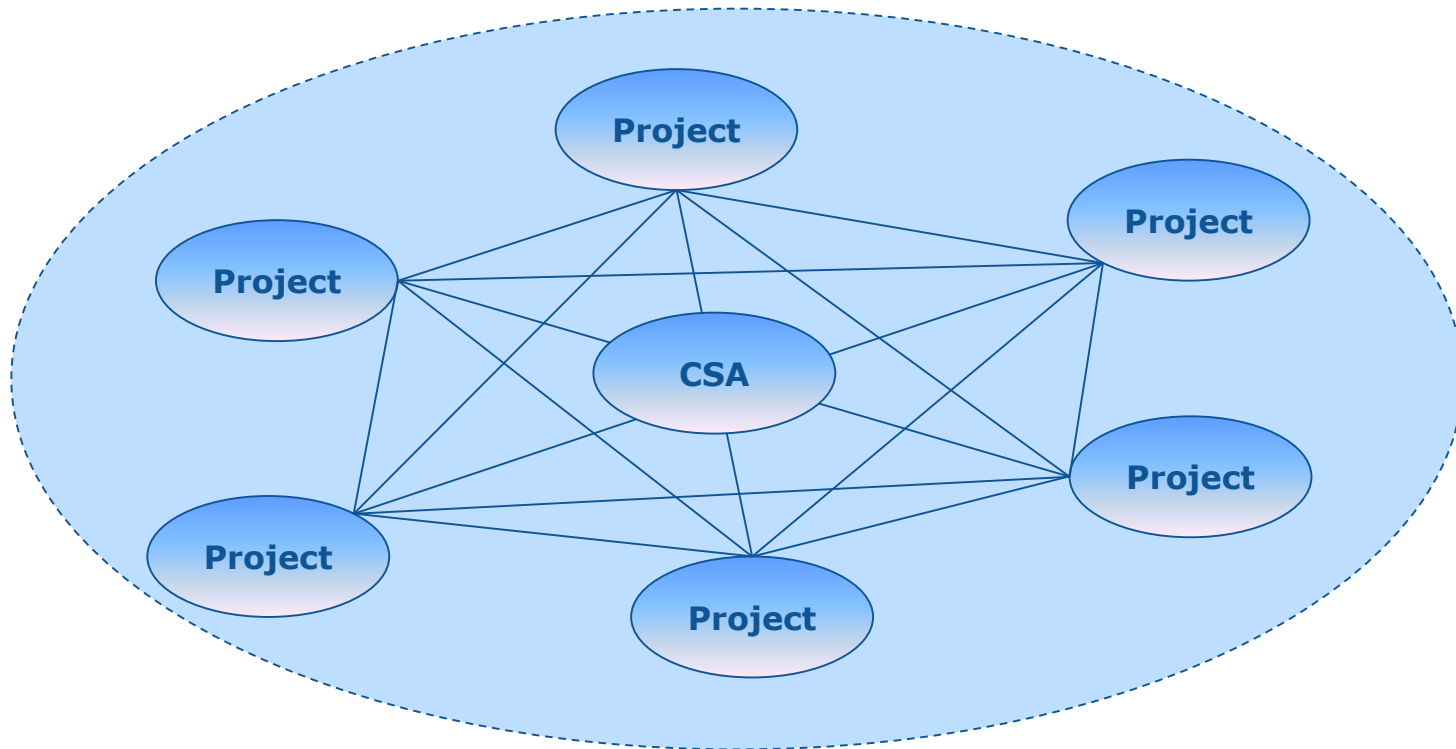


Consortium agreement

Coordination, decision making process, ...
Access to the results

Complementary grants

Flagship dimension

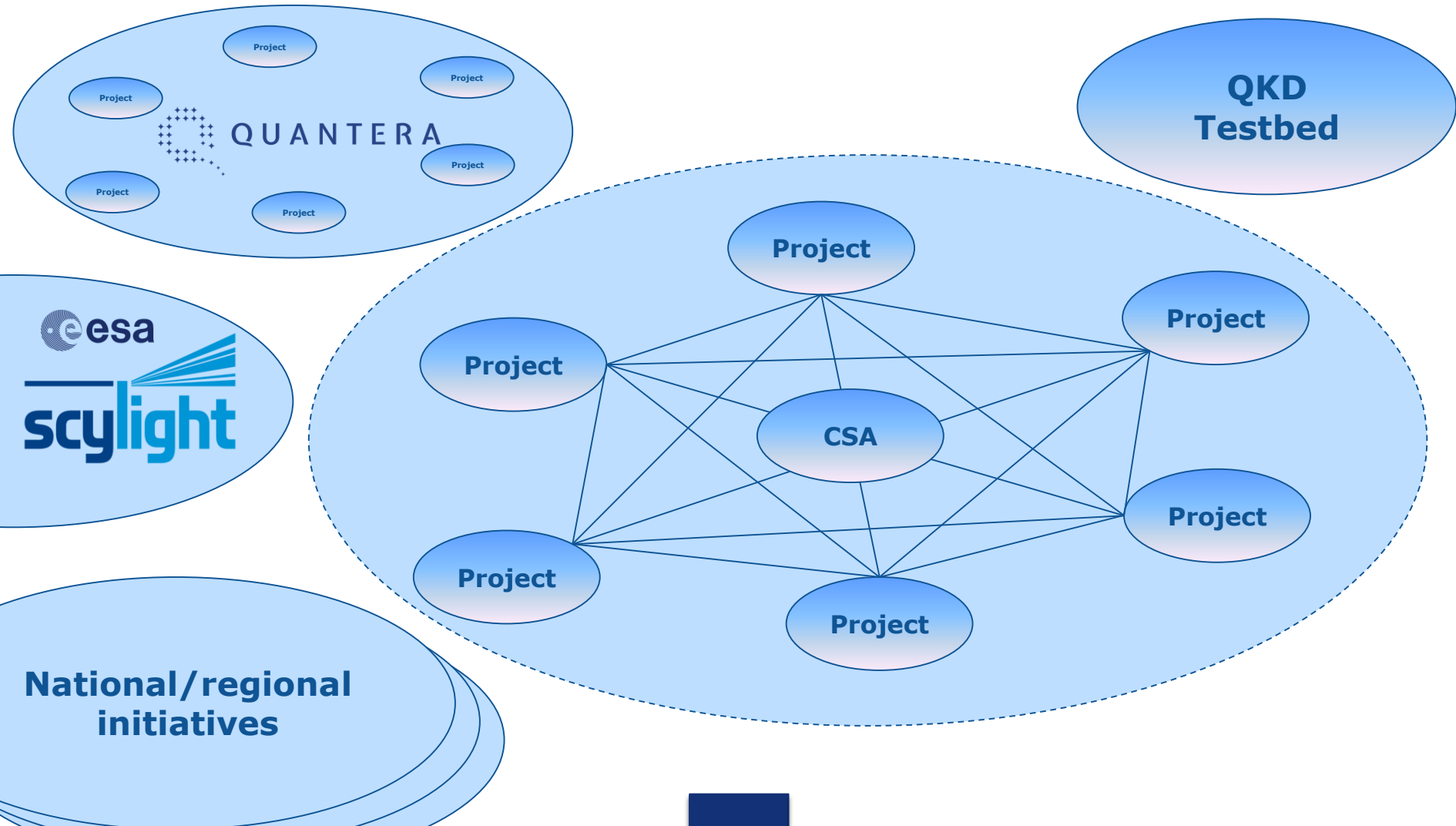


Art. 2: Complementary Grants ⇒ **Collaboration agreement**

Art 41.4: coordination, decision making process, ...

Art 31.6: access to the results

EU Quantum Technologies ecosystem



Timeline



European
Commission

2016

PREPARATORY STEPS



- 04/2016: Announcement in EU Cloud Initiative
- 09/2016: Set-up of the QT Flagship High Level Steering Committee
- Intermediate report (02/2017)
- Final report (09/2017)

2018

RAMP UP PHASE

- + Flagship Coordination & Support Actions: 0.5 m€ (2017) + 2 m€ (2018)
- + Flagship Research & Innovation Actions: 130 m€ (2018)

QUANT-ERA

- + QuantERA (01/2018): 26 countries, 36 m€ (1/3 EU)
- + QuantERA II (2020 - tbc): FET call: 10 m€

2019

CYBERSECURITY

- + H2020 LEIT ICT QKD Testbed call (2019): 15 m€

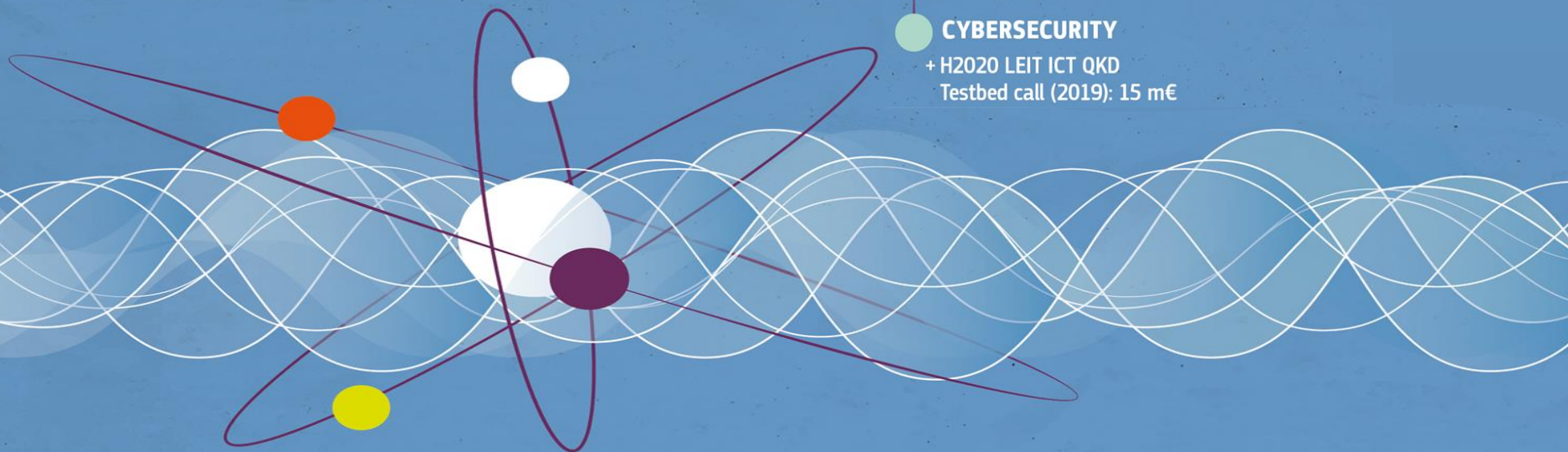
2020

FULL IMPLEMENTATION*



- + Series of QT calls
- + EU Quantum Key Distribution Network

** pending adoption under the next multi-annual framework programme*



Contact

cnect-quantum@ec.europa.eu