Action Line 2: ecosystem development

Information session
Freeke Heijman (AL-2 lead + executive board)
Elements

1. Startups: LightSpeed + (pre)seed capital
2. Hubs, fieldlabs and SME calls
3. House of Quantum/Q-campus
Startup support
What is LightSpeed?

This program is a stage agnostic, personalized support program built for aspiring and existing entrepreneurs in the quantum realm that we consider to be best of class according to market (market driven acceleration).

Our Focus:

This program is specially designed to address the hardest question for any startup founder: are you ready to scale and if so, where do you start with discovery around investment related parties that can help secure your vision?

Who is it for?

LightSpeed is for everyone, but it is specifically geared toward discovery and investment. Ranging from pre incorporation to series B and everything in between, LightSpeed is for the top of class at any stage quantum technology startup.
Start-up support until now

Among others:
- Qphox
- Orange Quantum Systems
- Qblox
- Delft Circuits
- In stealth (various)

Personal and tailored advisory:
1. Education on venture capital
2. Investor discovery
3. Investor materials & fundraising strategy
4. Captable assistance & scenario planning
5. Support in legal domains
6. Venture building strategy

Provided connectivity to leading global investors for current and future fundraising efforts:
1. FR: Quantonation (13 deals in Quantum), Breega
2. UK: Amadeus Capital, Hoxton Ventures
3. DE: Blueyard, HTGF
4. NL: INKEF, M Ventures

9 Dutch Quantum ventures onboarded and 5 more discovered (early)

Tailored start-up advisory - signals to indicate focus areas for building out support program

Successful community building via personal introductions. >50% global market covered
Preliminary analyses from start-up support program

Fundraising & talent identified as biggest start-up challenges (based on 6 submissions)

a. Start-ups seek more education on financing
b. International teams but scoring low on diversity
c. Founders have good access to talent related to tech side yet limited to no access to other skillsets required (marketing, branding, comms to name a few)
d. Limited resources mean less opportunity to attract top talent
e. Early signals indicate that grants / subsidies take up a large part of the resources of key and founding team members. Uncertainty whether these activities support or prevent sustainable growth.
Scenario IV - SAFE

Envisaged structure:

1. Quantum Delta NL provides the Pre-Seed Ticket as a Simple Agreement for Future Equity (or SAFE) note to the Applicant.

2. Legal form: SAFE note (no NL legal qualification). A SAFE is a propayment anticipating for a future equity round. Different legal qualification as CLA, as SAFE note does not qualify as loan agreement (i.e. no mandatory repayment).

3. No annual repayment or maturity date.

4. Only exchange for equity at future investment round by way of conversion of the SAFE note into shares of the Applicant.

5. NB: Quantum Delta NL has the option to assign conversion rights under the SAFE to a (to be incorporated) NL limited liability company (B.V.) fully owned by Quantum Delta NL.

6. In a future investment round, Quantum Delta NL will convert the SAFE note into the same type of shares issued to a future investor. Quantum Delta NL may consider additional discount of 20% on price per share.

7. Pro's:
   - Upside for Quantum Delta NL upon future investment round
   - Clean, straightforward instrument
Hubs, Fieldlabs and SME
Hubs: local ecosystems of institutes, facilities and businesses

Despite being a small country, the Netherlands is well endowed with expertise and facilities in the field of quantum technology. The backbone of the nation’s unique knowledge and innovation landscape is formed by five specialist innovation hubs. Each hub contains research institutes, universities, companies and start-ups/scale-ups and with a different focus. All these parties have a strong focus on collaborative research and innovation, not only with one another, but also with national and international enterprises.

- **Delft**: quantum computing, internet & network, with QuTech, Kavli Institute, Microsoft, Intel and others
- **Amsterdam**: applied quantum algorithms, quantum sensing & simulation, with QuSoft, CWI, UvA, VU, SURFsara and others
- **Leiden**: applied quantum algorithms, with aQa, Google, Shell, Volkswagen, Total and others
- **Eindhoven**: post-quantum crypto, quantum simulation & materials, with ASML, ThermoFisher, NanoLabNL and others
- **Twente**: quantum electronics and quantum photonics, with MESA+, Lockheed Martin, QuIX, imec and others
Fieldlabs: local initiatives to engage industry

- Hybrid regional / national
- With starting grant the first fieldlabs are already in the making, including:
  1. Quantum Application Lab (Amsterdam)
  2. Quantum for business (Delft)
- Other important initiatives such as WIQD also got support from QDNL
- Scaling of instrument under Groeifonds, terms and conditions to be decided
SME calls

- 5 ME per year for SME innovation projects via open calls

- Goal: engage existing high-tech SME in quantum revolution

- Terms, conditions and procedures still to be defined

- Learn from NanonextNL and EZK instruments like MIT, TKI, IPC
locatie ‘House of Quantum’
House of Quantum

Villages

Openbaar

Atrium / 'dorpsplein'

Semi openbaar

Niet openbaar

Entree

Gedeelde faciliteiten

Aanzet huisvestingsconcept en programma van eisen
**Routekaart ‘House of Quantum’**

**2020**
- initiatief fase

**2021**
- definitie fase
- aanbesteding

**2022**
- ontwerpfase
- TO fase

**2023**
- aanbesteding
- realisatie

**2024**
- inhuisen en valideren

---

**Haalbaarheidsonderzoek:**
- kaders uitgangspunten
- interviews
- basis pve
- budget
- start locatieonderzoek

**Ontwerpfase:**
- schetsontwerp
- voorlopig ontwerp
- definitief ontwerp

**Selecteren en contracteren ontwerpende partijen:**
- architect
- installatie adviseur
- constructeur
- bouwfysica en akoestiek

**Besteksstukken:**
- contractstukken
- uitvoerende partijen
- aanbestedingsstukken

**Uitvoerende partijen:**
- bouwkundige aannemer
- installateur E & W

---

In samenwerking met:
Other QDNL real estate developments

- Eindhoven location and cleanroom
- Amsterdam location QuSoft, Quantum Amsterdam
- Delft cleanroom
- Twente QUANT unilocation

Quantumtech Eindhoven University of Technology Literally Going Underground

Gerrit M.W. Kroesen, Servaas J.J.M.F Kokkelmans
Thank you for your attention