

SPRIN-D

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FEDERAL AGENCY FOR
DISRUPTIVE INNOVATION

A HOME FOR
PEOPLE WITH RADICAL NEW
IDEAS

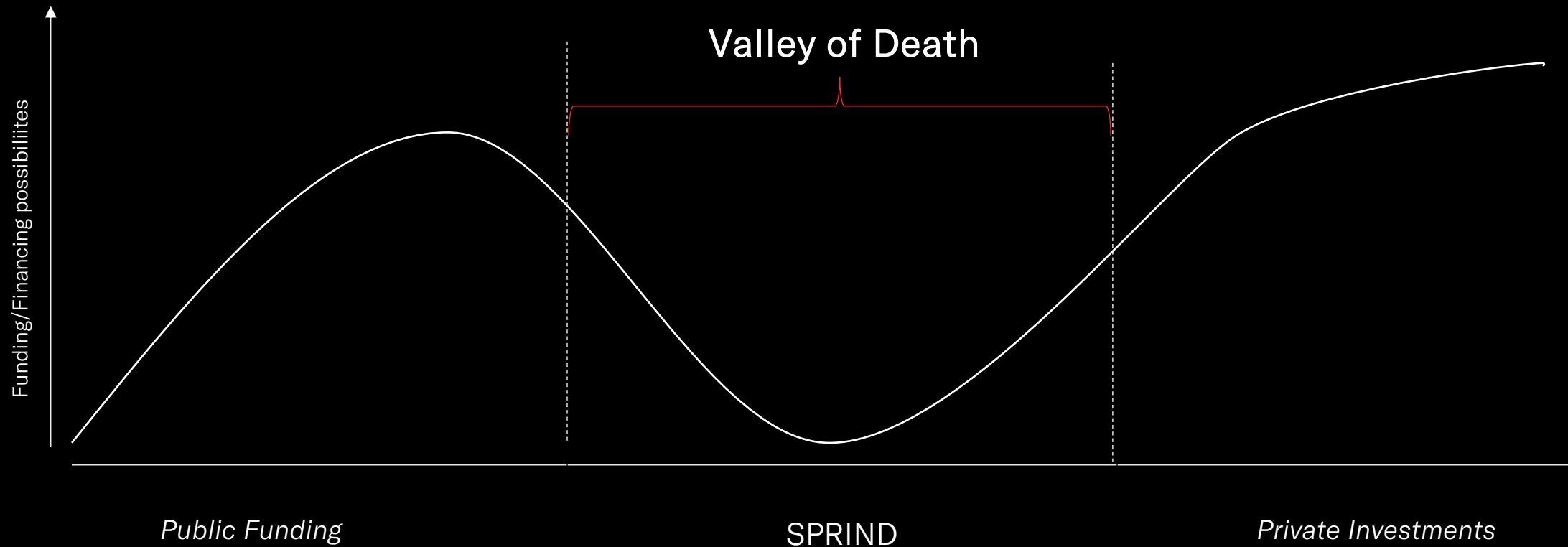
POWERED BY:



Bundesministerium
für Wirtschaft
und Klimaschutz



Bundesministerium
für Bildung
und Forschung



SPRIND IS SEARCHING FOR WAYS TO OVERCOME THE SOCIAL,
ENVIRONMENTAL AND ECONOMIC CHALLENGES
OF OUR TIME.

BREAKTHROUGH INNOVATIONS

PROVIDE
ANSWERS TO UNDERLYING
PROBLEMS

INVOLVE
UNCONVENTIONAL METHODS

HAVE THE POTENTIAL
TO OPEN UP NEW MARKETS



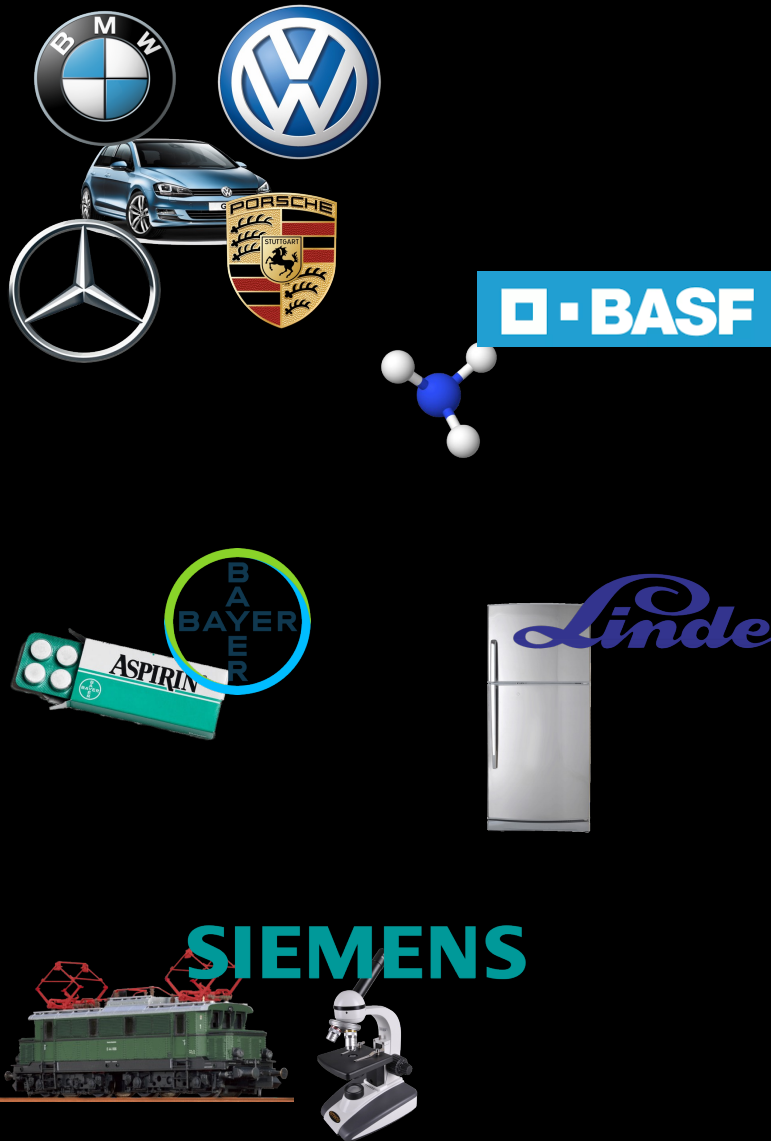
HOW ARE BREAKTHROUGH INNOVATIONS ASSESSED?

IS THERE POTENTIAL TO OPEN UP A NEW MARKET AND RADICALLY QUESTION THE STATUS QUO?

IS THERE POTENTIAL TO CREATE THE NUCLEUS OF A NEW INNOVATION ECOSYSTEM?

DOES THE INNOVATION ADDRESS A GAP IN THE MARKET IN A SPECIFIC FIELD?

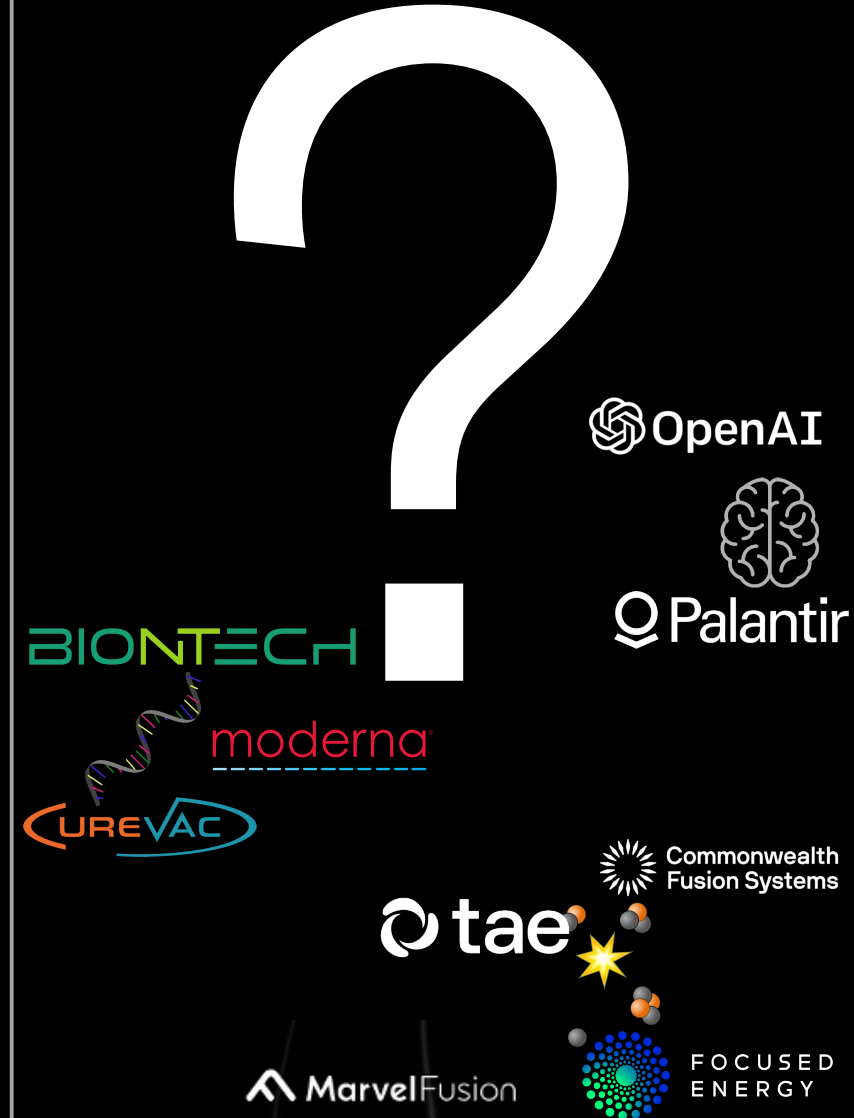
1820 – 1920



1920 – 2020



2020 – 2120





2019

GEGRÜNDET

50+

MITARBEITER:INNEN

1200+

PROJEKTE EINGEREICHT



HOW DOES OUR FINANCING WORK?

PROJECT
GMBH

CHALLENGES

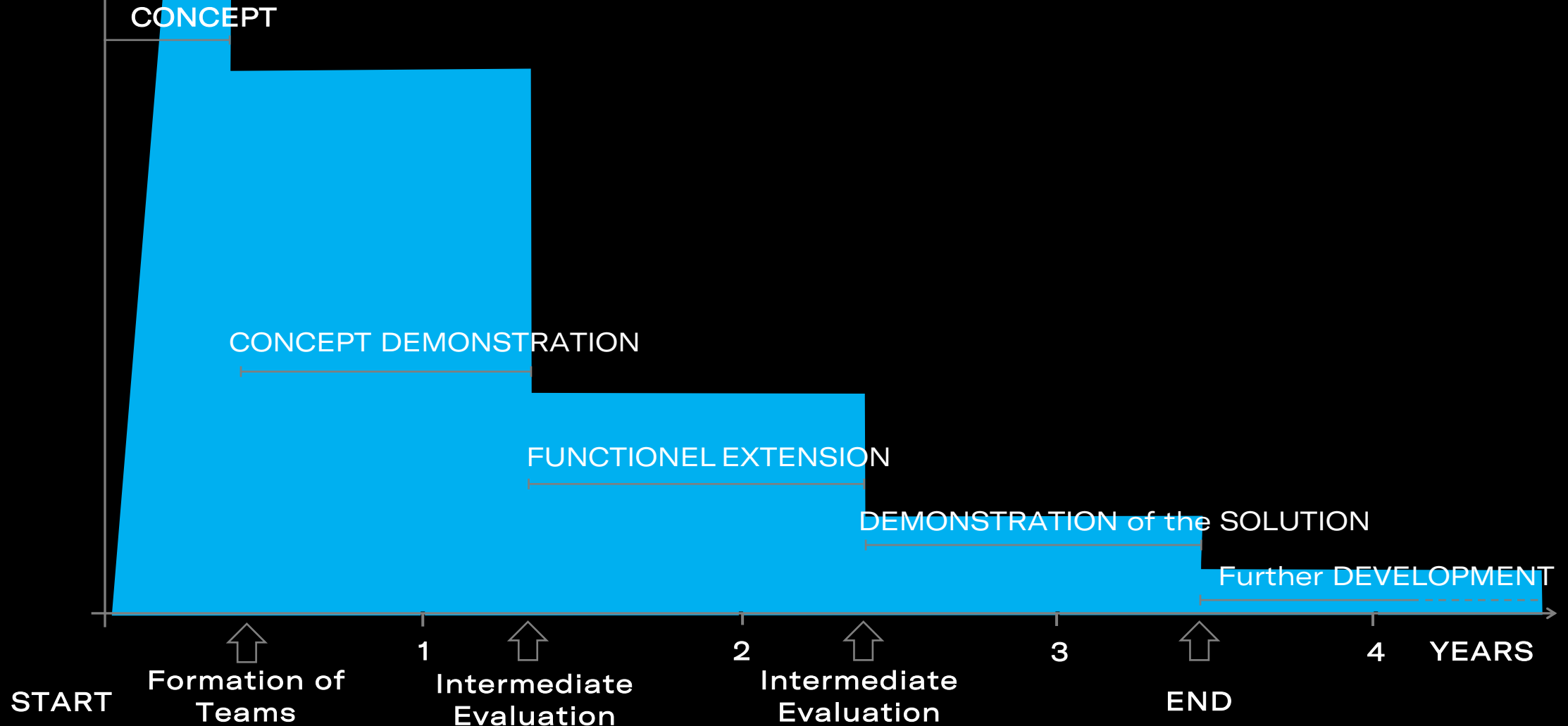
Following a successful analysis and evaluation process, SPRIND, at present, has the right to establish project subsidiaries for projects with promising breakthrough potential which are funded with between 4 and 15 million EUR annually by the Federal Government.
During the evaluation process, validation studies can be commissioned to clarify individual questions pertaining to a project application.

Teams taking part in our innovation contests, our challenges, can currently receive funding of between around 500,000 and 3 million euros, depending of the stage and topic of the Challenge.
The funding is provided as pre-commercial procurement for research and development services.

CHALLENGES

PROCESS SPRIND CHALLENGES

#TEAMS



NEW COMPUTING CONCEPTS

(+ NEW COMPUTING MACHINERY)

WE NEED BREAKTHROUGH INNOVATIONS TO DEVELOP NEW COMPUTING CONCEPTS THAT SAVE ON RESOURCES.

IF ENERGY CONSUMPTION CONTINUES TO INCREASE AT THE SAME RATE, IT WILL TAKE UP THE ENTIRE GLOBAL CAPACITY FOR ENERGY PRODUCTION BY 2040.

WE NEED TO ADDRESS ISSUES THAT IT HASN'T BEEN POSSIBLE TO SOLVE BEFORE AND DEVELOP GROUNDBREAKING NEW COMPUTING CONCEPTS.

A QUANTUM SHIFT FOR NEW ANTIVIRAL AGENTS

VIRUSES ARE AN UNPREDICTABLE THREAT TO GLOBAL HEALTH, THE ECONOMY AND SOCIETY – THE SARS-COV-2 PANDEMIC MADE THAT MUCH CLEAR TO ANYONE WHO WASN'T ALREADY AWARE.

WE NEED HIGHLY INNOVATIVE APPROACHES TO COMBAT VIRAL INFECTIONS.

AND THAT'S WHY SPRIND IS SUPPORTING NEW TECHNOLOGICAL APPROACHES FOR BREAKTHROUGH INNOVATIONS TO COMBAT VIRAL INFECTIONS WITH THIS CHALLENGE.

CARBON-TO-VALUE

EVER SINCE THE INDUSTRIAL REVOLUTION, THE HUMAN RACE HAS BEEN EXTRACTING AND BURNING HUGE AMOUNTS OF CARBON IN THE FORM OF OIL, COAL AND NATURAL GAS.

THE GREENHOUSE GASES RELEASED IN THE PROCESS ARE DRAMATICALLY CHANGING THE LIVES OF PEOPLE ALL AROUND THE WORLD

IN THE FIGHT AGAINST CLIMATE CHANGE, WE NEED TO FIND A WAY OF SUSTAINABLY REMOVING CO₂ FROM THE ATMOSPHERE.

LONG-DURATION ENERGY STORAGE

WE NEED BREAKTHROUGH INNOVATIONS TO STORE ENERGY COST-EFFECTIVELY AND EFFICIENTLY IN THE LONG TERM.

LONG-TERM ENERGY STORAGE IS KEY TO ACHIEVING ENERGY AUTONOMY AND HITTING CLIMATE TARGETS.

THE CHALLENGE? STORING ENERGY AND EFFICIENTLY PROVIDING POWER FOR MORE THAN TEN HOURS WITHOUT USING CRITICAL RAW MATERIALS.

The background features a warm color palette of oranges and yellows. It is decorated with various abstract shapes, including large circles and organic, flowing forms. A pair of glasses with a thin frame is faintly visible in the center, partially obscured by the text and other shapes.

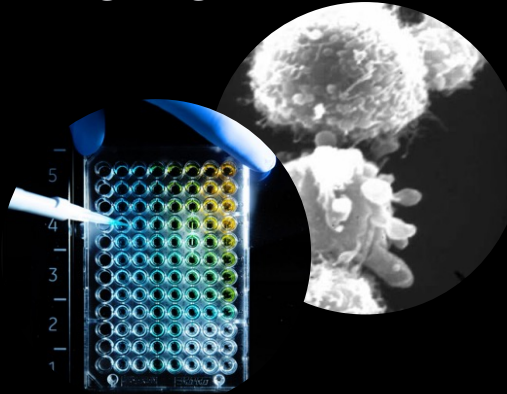
CIRCULAR BIOMANUFACTURING

SPRIND SUBSIDIARIES

BIOCHIPS for
PERSONALIZED
MEDICINE



HEALING
CANCER



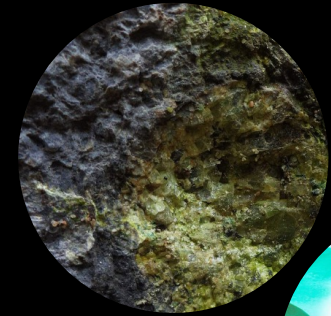
HARVESTING WIND
AT EXTREME
HIGHTS



ELIMINATION
MICROPLASTICS
FROM OUR WATER



CLIMATE-NEUTRAL
CONSTRUCTION

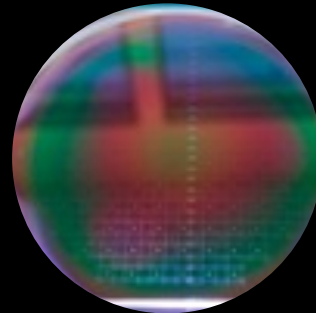


LASERS FOR
FUSION

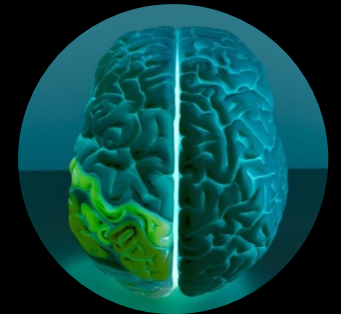
NEUTRALISING
VIRUSES WITH
DNA-ORIGAMI



FUTURE OF
COMMUNICATION



BUILDING OPTICS

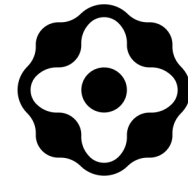
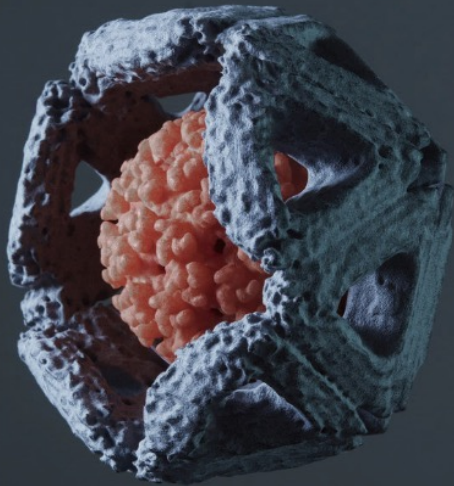
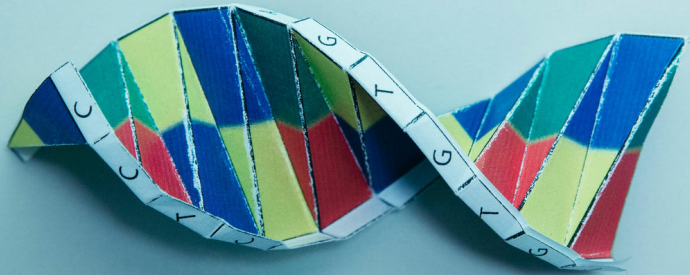


STORING DATA LIKE
OUT BRAIN

DEFEATING
ALZHEIMERS



MEMRISTOR – KICKING-
OFF the
SEMICONDUCTOR
REVOLUTION



Nanogami

DNA origami is used to design precise three-dimensional nanostructures. Form and function can be designed as desired. Nanogami is developing this platform technology for various fields of application:

Biochips that will enable fast, precise and inexpensive analysis for medicine and biotechnology.

Virus traps, which are to be used as the first broad-spectrum virostatic agent and against previously untreatable viral diseases.

LOGIBODIES that identify cancer cells and then activate the body's own immune system in a targeted manner.

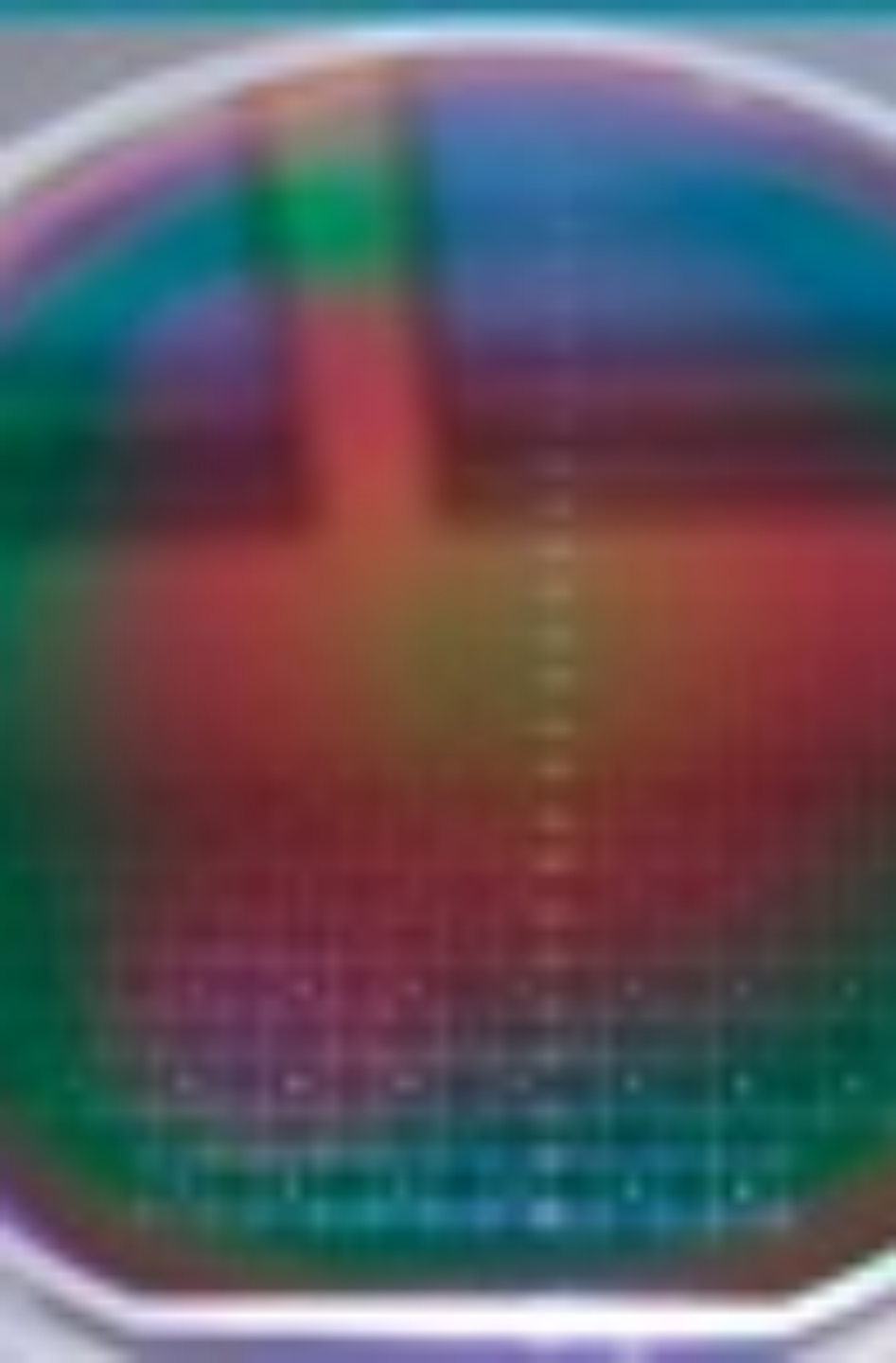


PRI INNOVATION

PRIInnovation has partnered with Priavoid to develop an active ingredient that can fight Alzheimer's disease.

The active ingredient in question can be administered orally, has better anti-inflammatory properties than antibody treatments and has been shown to eliminate toxic amyloid- β plaques.

The current goal is to prove the effectiveness of the active ingredient as part of a phase II clinical trial. Following a positive result, the next step will be a pivotal trial.



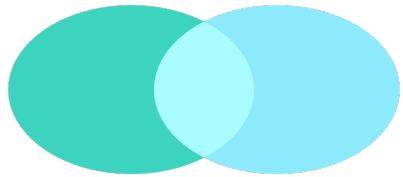
MemLog

MemLog develops the first memristor that enables both digital and analog data processing and storage in a single component.

The Von Neumann architecture consumes an enormous amount of energy. As a result, edge computing and edge sensor technology are reaching their performance limits

Memristors provide the basis for neuromorphic computers, ushering in a new computing paradigm. This enables significantly higher performance.

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PULSED LIGHT TECHNOLOGIES

is a 100% SPRIND subsidiary
with the goal to develop infrastructure
to support laser-driven fusion

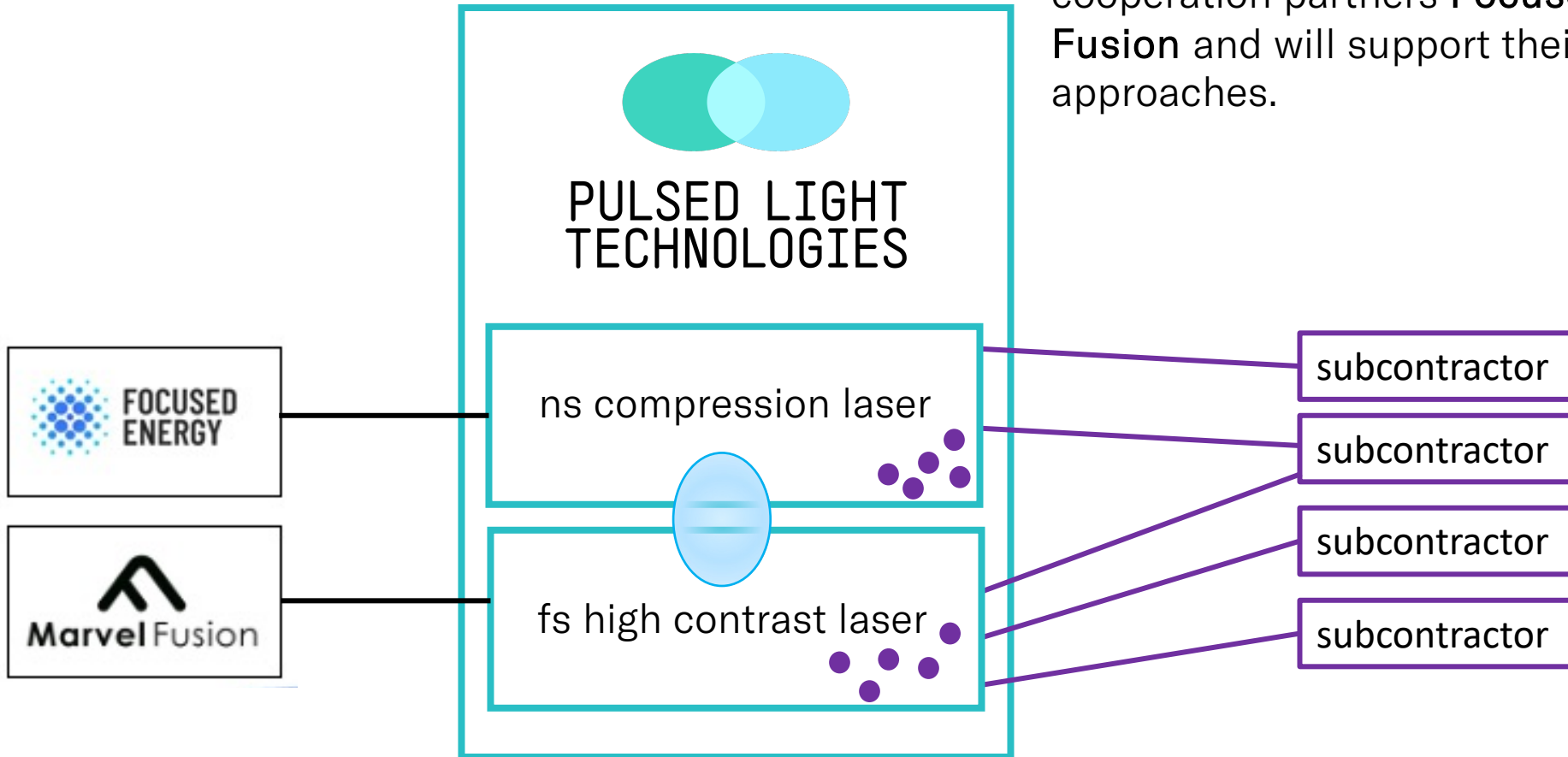
HEIMAT FÜR
RADIKALE NEUDENKER*INNEN

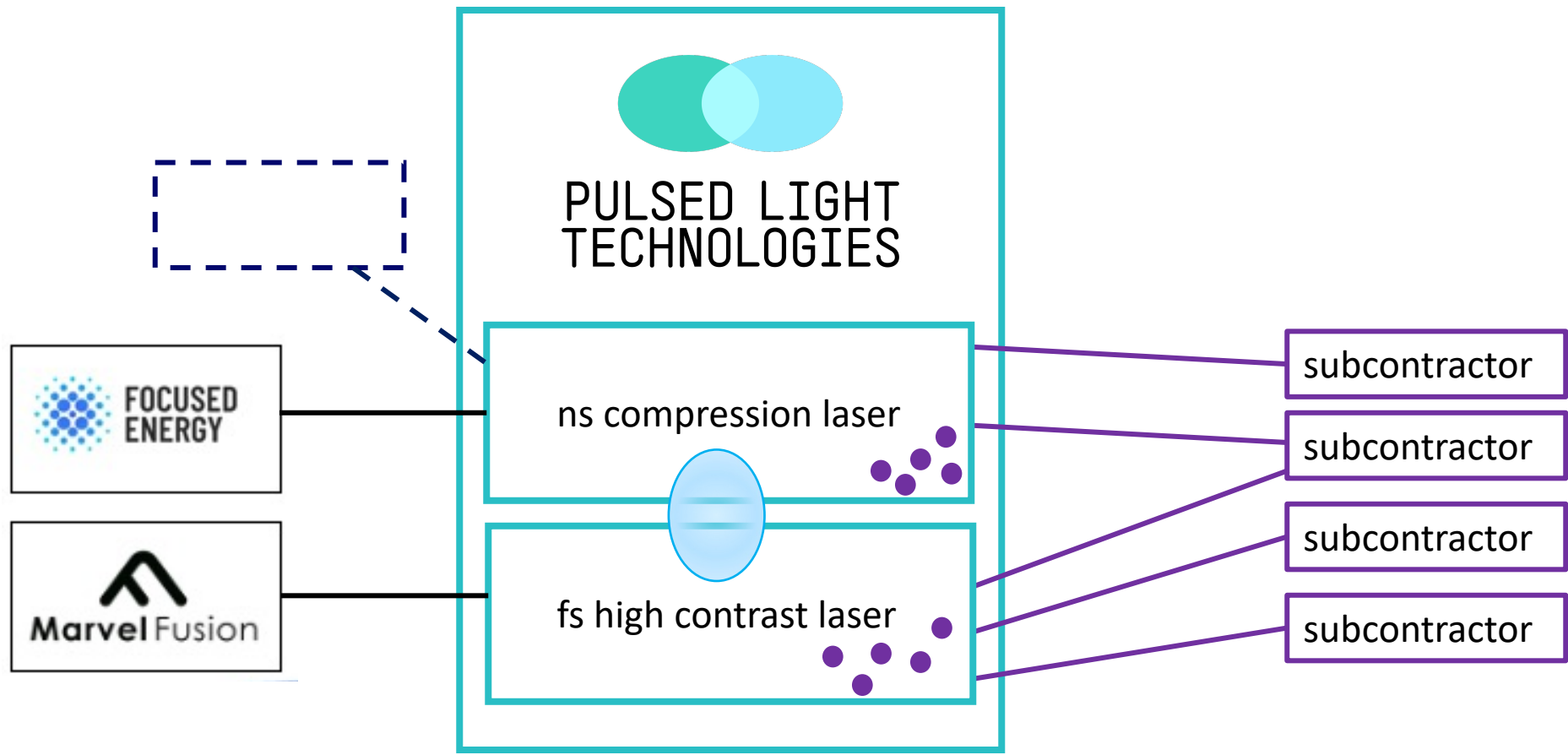


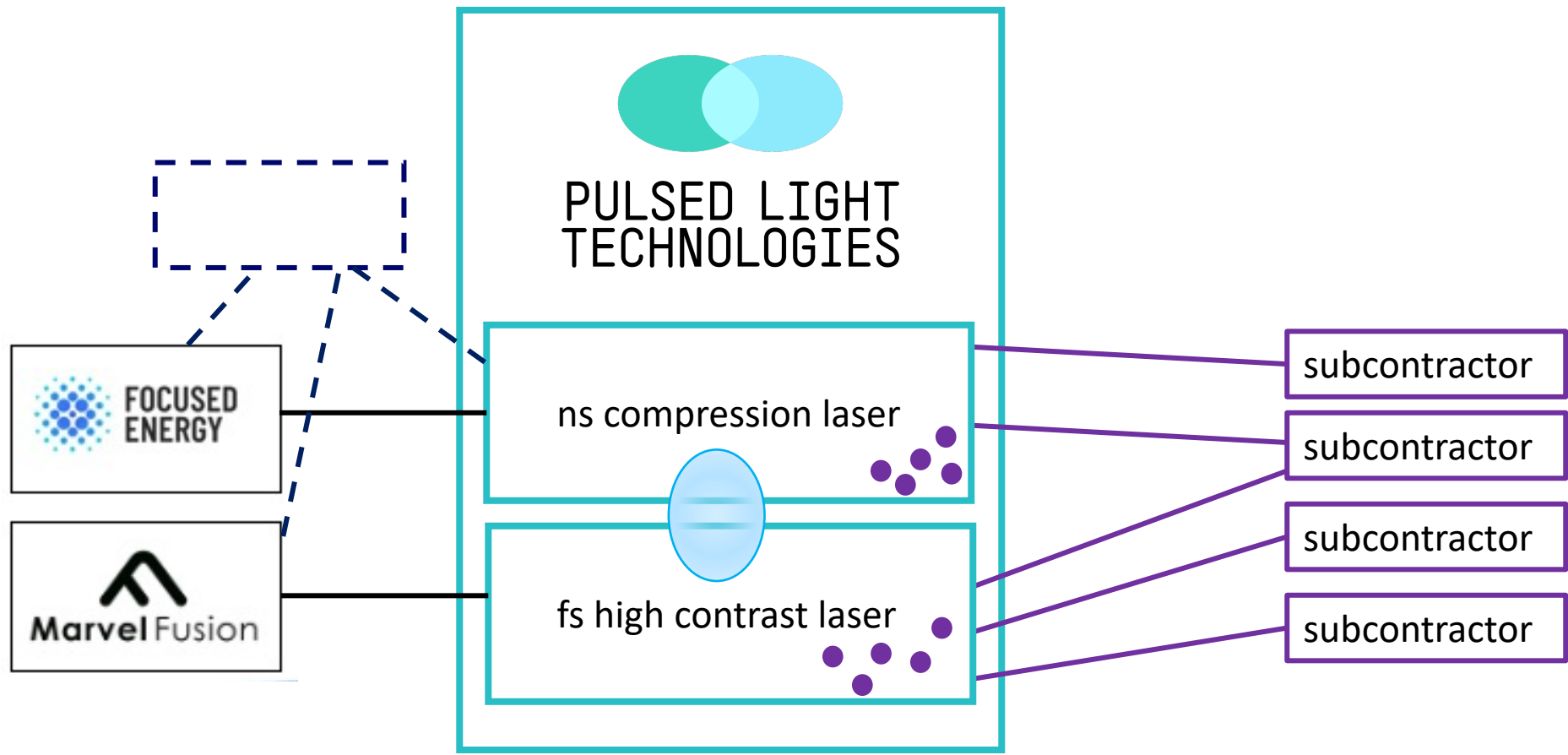
Since August 2023 PLT finances two laser development projects with **90 Mio. EUR** in total.

Key features of power-plant-ready laser systems will be demonstrated (e.g. rep. rate, efficiency)

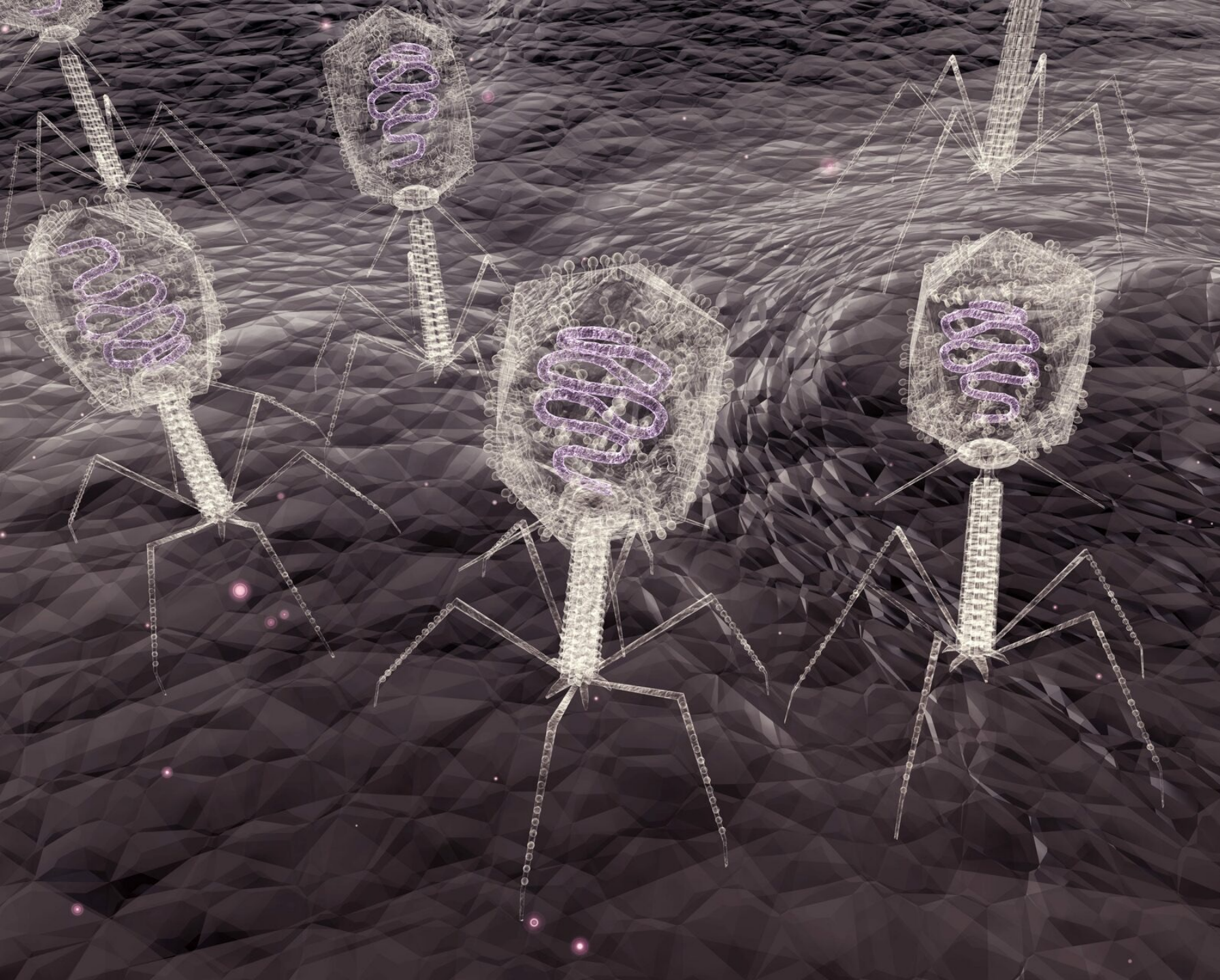
The laser systems are developed together with PLT's cooperation partners **Focused Energy** and **Marvel Fusion** and will support their respective fusion approaches.







VALIDATION CONTRACTS



Phages to battle multi-resistant germs

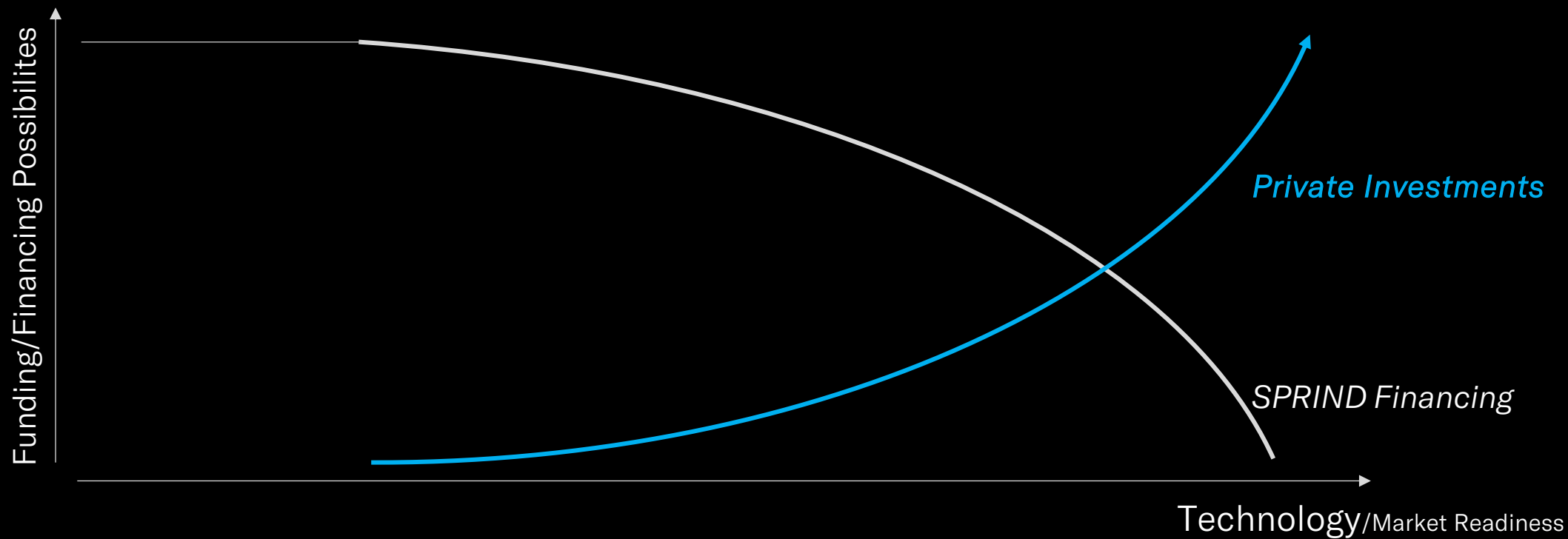
Validation contracts regarding fusion topics
running/in preparation



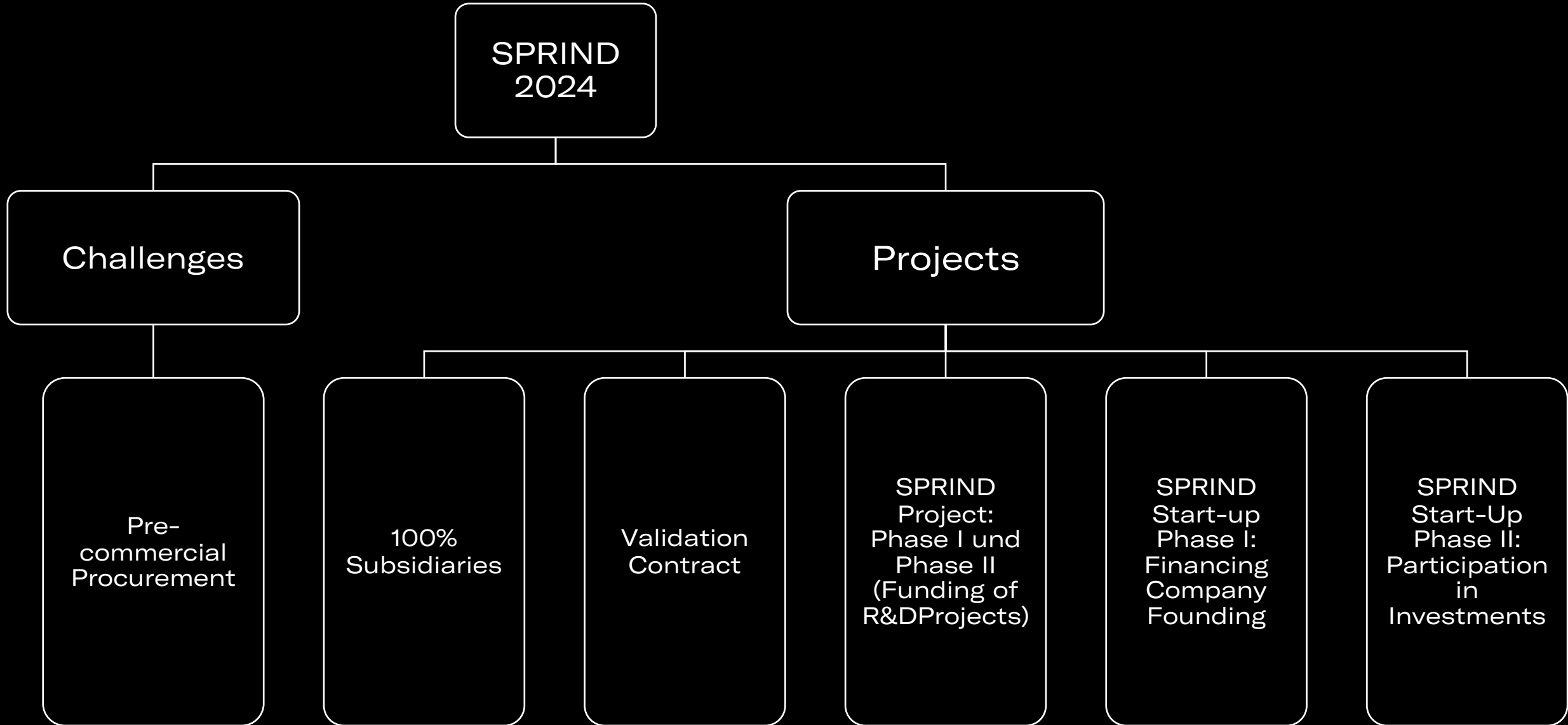
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FREIHEITSGESETZ

WITH SPRINDFG: SMOOTH TRANSITION FROM PUBLIC TO PRIVATE FINANCING



EXTENDING THE SPRIND TOOLBOX



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