



# OPTIMAT

## 2. Network Meeting

Dr. Torsten Hermanns, Prof. Patrick Masset

08.12.2023

EurA AG  
Max-Eyth-Straße 2  
D-73479 Ellwangen  
[www.eura-ag.de](http://www.eura-ag.de)

Tel.: +49 (0)7961 9256-0  
Fax: +49 (0)7961 9256-11  
[info@eurag.de](mailto:info@eurag.de)

## 2. NETWORK MEETING OPTIMAT

---

### Part 1 – Opening of the network meeting

1. Welcome
2. Status of the network
3. Acquired fundings
4. Next steps

### Part 2 – Funding opportunities

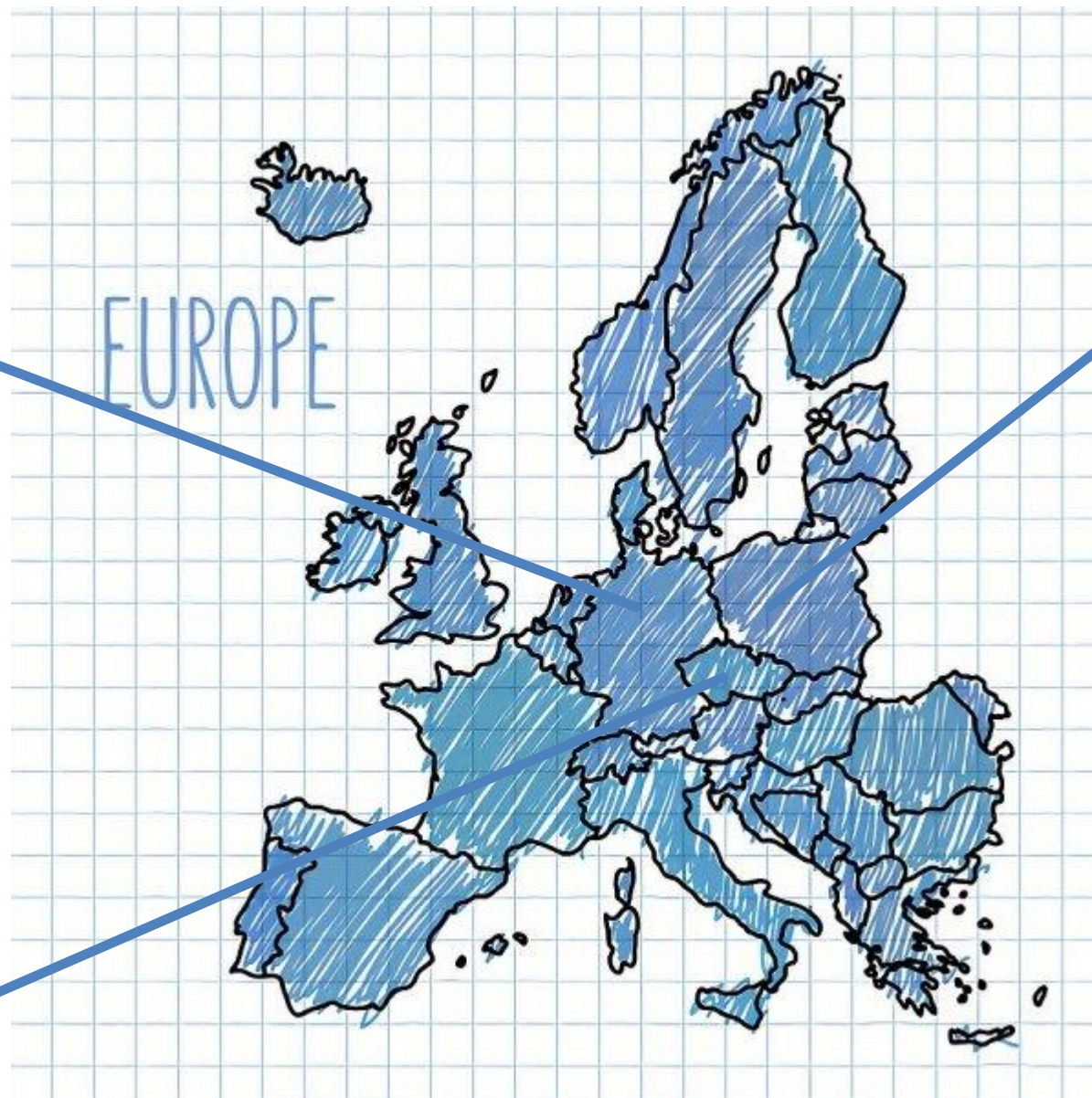
1. EIC Pathfinder
2. EIC Accelerator
3. Current information on German fundings

## 2. NETWORK MEETING OPTIMAT

---

# Part 1

# Who are we?



Amazemet  
Sygnis  
Slaski Klaster Nano  
Polish Cluster of Composite Techn.  
Warsaw University of Technology  
Corrosion and Protective Coatings  
Centre Lukasiewicz

## New network partners:

- Alpha Powders
- Lukasiewicz Research Network – Krakow Institute of Technology

27 partners from three countries:

- Germany: 18
- Poland: 8
- Czech Republic: 1

SLM Solutions

Fraunhofer ILT

Deutsche Edelstahl Werke

Fraunhofer IFAM

Technallium

Access

Disc Direct Handels

Sigma Materials

AM Entrepreneur

Bayerisches Laserzentrum

Rosswag

Ponticon

Indutherm

AM Polymers

fem

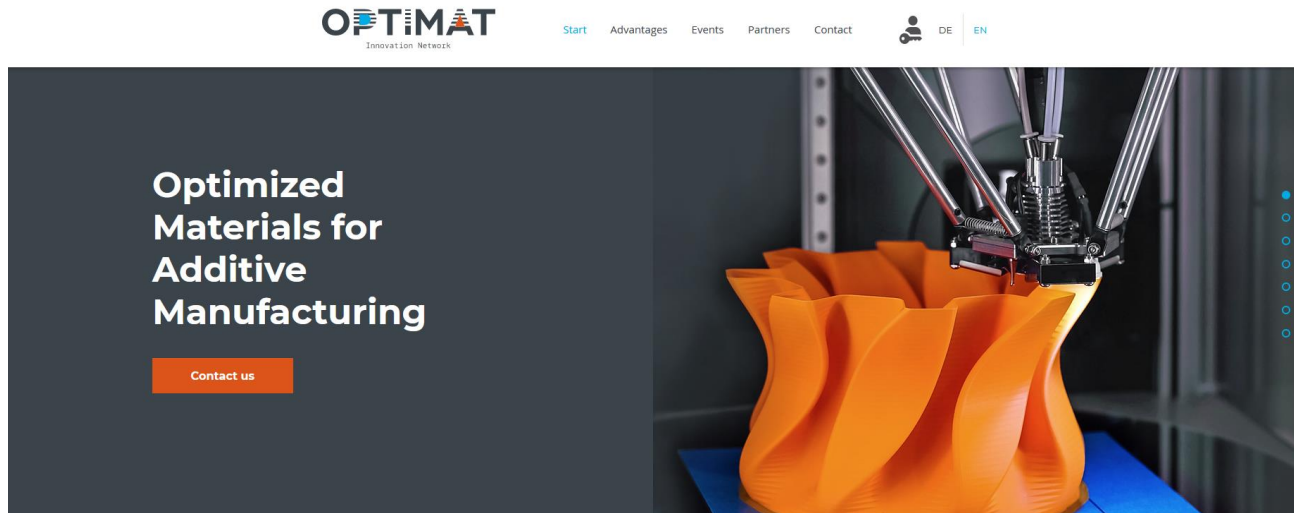
Hochschule Aalen

Q.big 3D

Kessel Feinguss

Safina

- Homepage:



<https://www.optimat-am.eu/>

- Logo:



# ACQUIRED FUNDINGS AFTER 1 YEAR

Nr	Titel	NW-Partner	Programm / Funding Volume
<i>Funded</i>			
1	WasteReduct4AM - Entwicklung einer automatisierten digitalen Prozesskette für die Abfallreduktion von industriellen 3D-Druck-Verfahren	Disk Direct Handels GmbH	BMUV (DigiRess) / 173.000 Euro
2	GobalAM - Enabling Laser Powder Bed Fusion for Large Scale Production of Multi-Material Components	Amazemet, Safina	EU (Horizon Europe) / 726.000 Euro
3	ReProd-USE – Automatisierte on-site Reparatur- und Produktions-Prozesskette auf Basis rezyklierter Rohstoffe aus anthropogenen Lagern	Fraunhofer ILT	BMUV (DigiRess) / 405.000 Euro (on hold -> ongoing budget negotiations with ministry)
4	Erforschung und Entwicklung neuartiger bindemittelfreier Aluminium-Hitzeschilde für flexible Substrate	Technallium	Steuerliche Forschungszulage / 50.000 Euro
5	DigiChain4MBJ - Entwicklung einer vollständig automatisierten digitalen Prozesskette beim Metal Binder Jetting	Production to go gmbH	BMUV (DigiRess) / 132.000 Euro

Nr	Titel	NW-Partner	Programm / Requested funding
<i>Submitted and positive feedback after review</i>			
1	AutoMBJ – Automatisierung des Grünteilhandlings beim Metal Binder Jetting und Qualifizierung des Verfahrens für Aluminiumlegierungen	Fraunhofer IFAM, Disc Direct	ZIM / 460.000 Euro

➤ **Total funding after 1 year: 1.946.000 Euro**

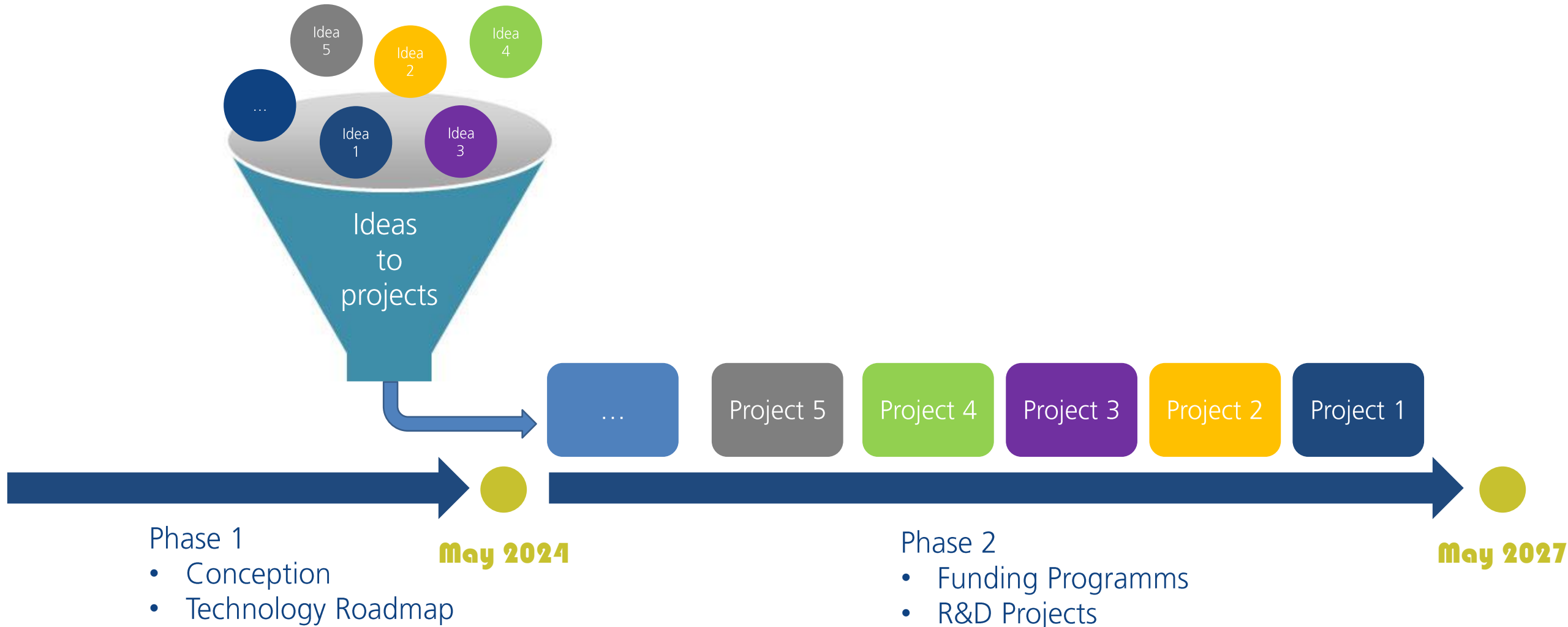
# TECHNOLOGIE ROADMAP UND F&E PROJEKTE

Nr	Titel	NW-Partner	Programm / Requested funding
<i>Submitted but no feedback so far</i>			
1	COPHEAM – Conception of High-Performance Heat Exchangers by Additive Manufacturing	KIT, fem, Nanonet	Cornet / 483.046 Euro

Nr	Titel	NW-Partner	Programm / Scheduled submission date
<i>In peperation</i>			
1	TiFINE – Entwicklung eines neuartigen Titangießprozesses zur Steigerung von Energieeffizienz und Nachhaltigkeit	Kessel Feinguss, fem	ZIM / Submission in December
2	HiPerPoly4SLS – Entwicklung eines neuartigen High Performance Kunststoffes für das Selective Laser Sintering zur flexiblen On Demand Fertigung von Kunststoffbauteilen	AM Polymers/ Disc Direct Handels	ZIM / Submission in January

➤ Expected funding volume: 700.000 - 800.000 Euro

# NEXT STEPS





# NEXT STEPS

- *Initiation of even more projects:*
  - Contact me with your project ideas
  - Make use of our further formats: Tech Talks, Workshops, Networking outside the box, AI barbecue etc.
    - Contact me if you have ideas for additional formats
  - We can organize creativity workshops to generate project ideas (first example today)
- *Even stronger promotion of OPTIMAT:*
  - Fairs, conferemces: formnext 2024, AM Forum 2024, InterNanoPoland 2024, etc.
  - Exhibits from funded projects acquired in OPTIMAT can also be presented here
    - Excellent marketing opportunity for the individual partners!
  - Further ideas are also very welcome here!

## 2. NETWORK MEETING OPTIMAT

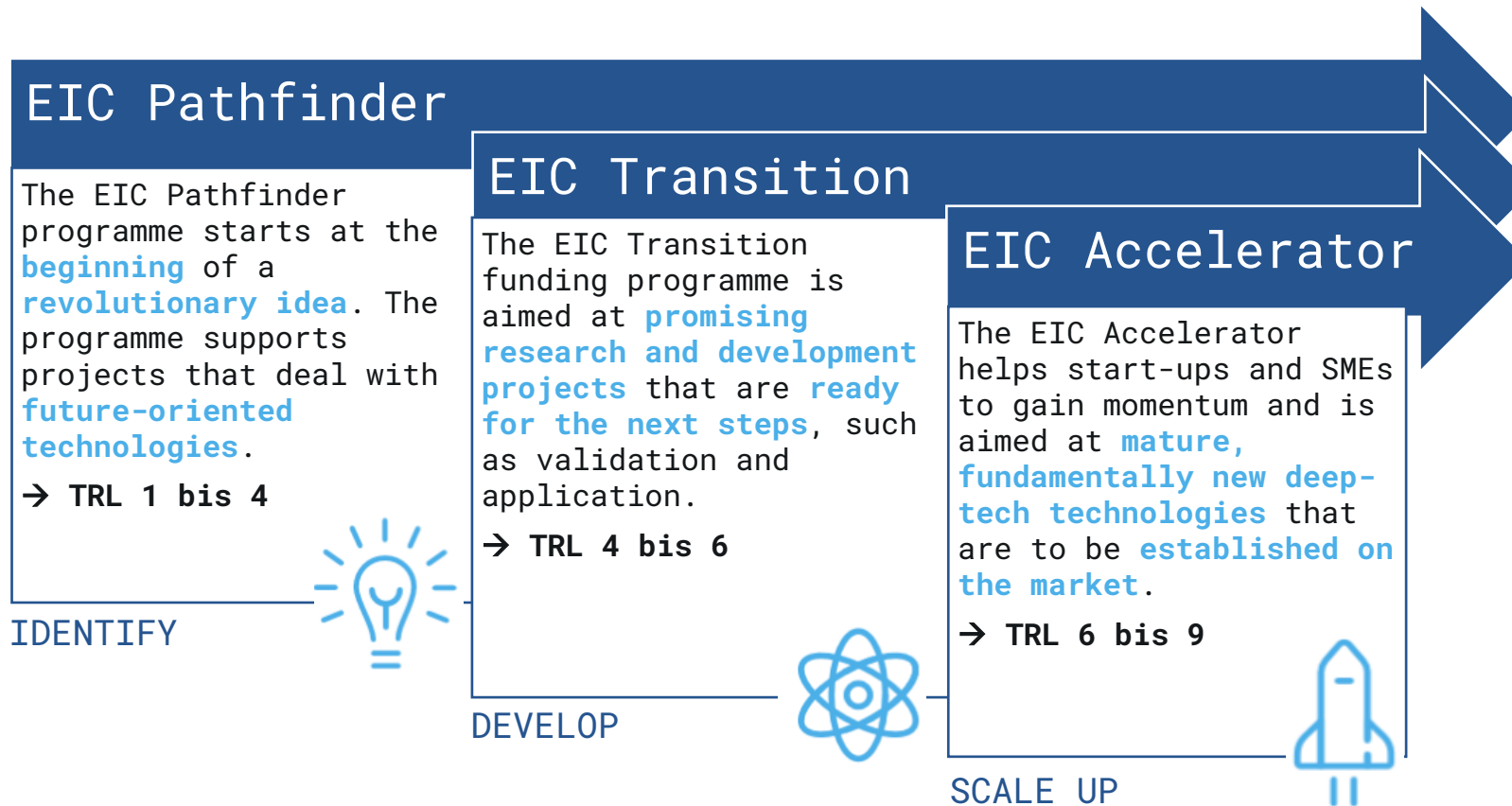
---

# Part 2

# European Innovation Council (EIC)

1

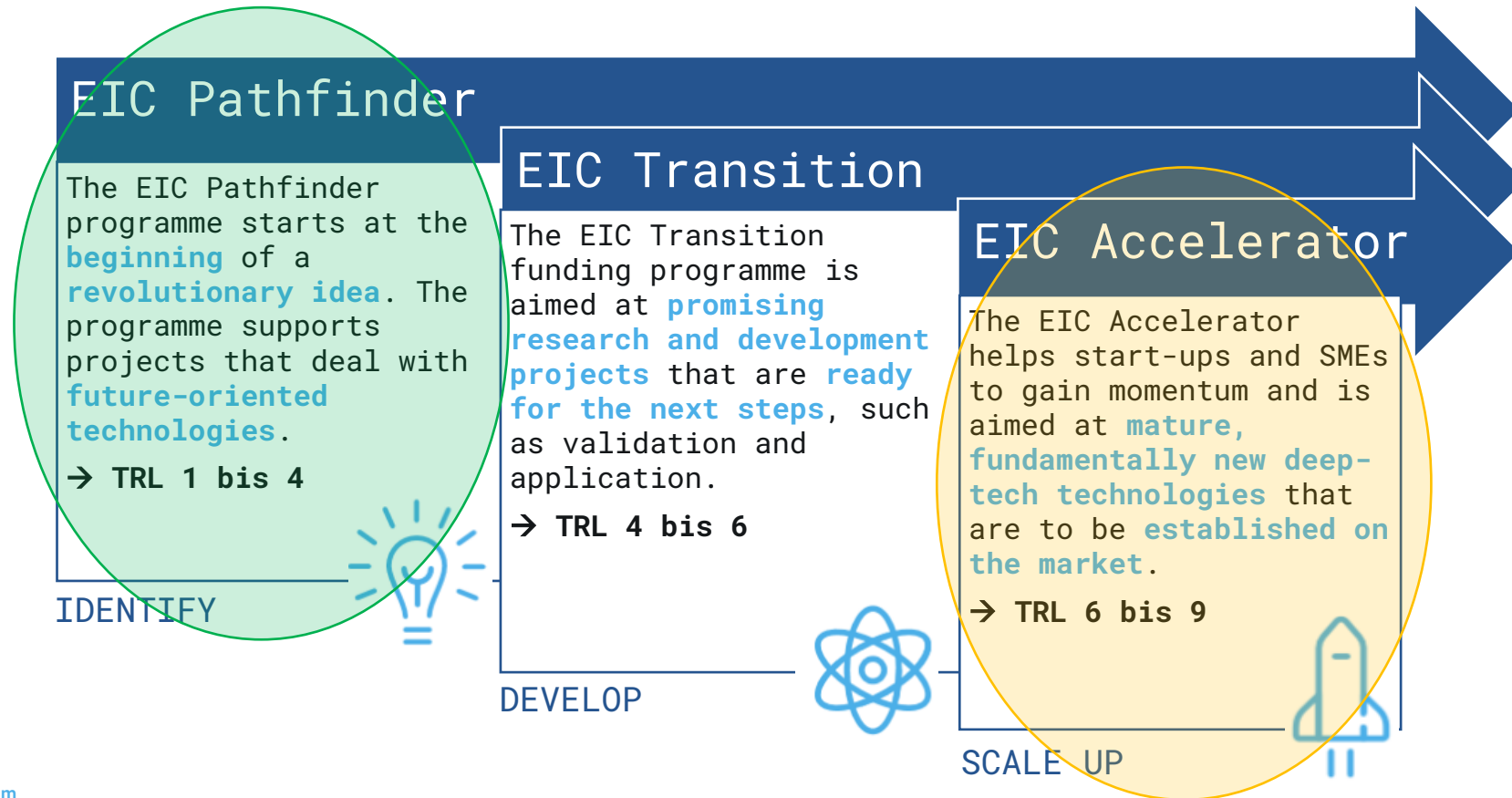
- ➔ Three funding programmes under the umbrella of the EIC to develop and implement critical technologies that are highly relevant to the EU's green and digital transitions.



# European Innovation Council (EIC)

1

- ➔ Three funding programmes under the umbrella of the EIC to develop and implement critical technologies that are highly relevant to the EU's green and digital transitions.





# EIC Pathfinder



**Pathfinder goes beyond what is already known.  
Visionary thinking can open up promising  
avenues towards powerful new technologies.**

*(European Innovation Council 2023)*



The EIC Pathfinder aims to identify radically new technologies that have the potential to create entirely new markets. To this end, visionary and high-risk projects are supported at an early stage of development.



- Do you have a visionary idea for a future technology that could lead to a substantial improvement in our lives?
- Do you see a plausible way to achieve the scientific breakthrough that will make this technology possible?
- Can you imagine working with an interdisciplinary team of researchers and innovators to realise the proof of principle and create the scientific basis for your future technology?

If you can answer "yes" to these questions, the EIC Pathfinder could be the right programme for your idea.

*(National contact Point Germany - DLR)*

# EIC Pathfinder: When ideas become groundbreaking reality

## Topics

EIC Pathfinder  
open /  
open-topic

EIC Pathfinder  
Challenges /  
topic-specific



Pathfinder Challenges 2023:

- 1.Clean and efficient cooling
- 2.Construction digitilization
- 3.Precision nutrition
- 4.Responsible electronics
- 5.In-space solar energy



# Who can apply?

## Pathfinder Open

- Consortium of at least three independent legal entities (e.g. universities, research organisations, SMEs, companies, start-ups) from three different Member States or Associated States, including one partner from a Member State

## Pathfinder Challenge

- Individual applicants (not for large companies) from Member States or Associated States
- Consortium of two independent legal entities from two different Member States or Associated States
- For consortia of three or more partners, the standard rules apply (see Pathfinder Open)

# What funding is possible?

6

EIC Pathfinder  
Open

$\leq 3$  Mio. €  
100 %

EIC Pathfinder  
Challenge

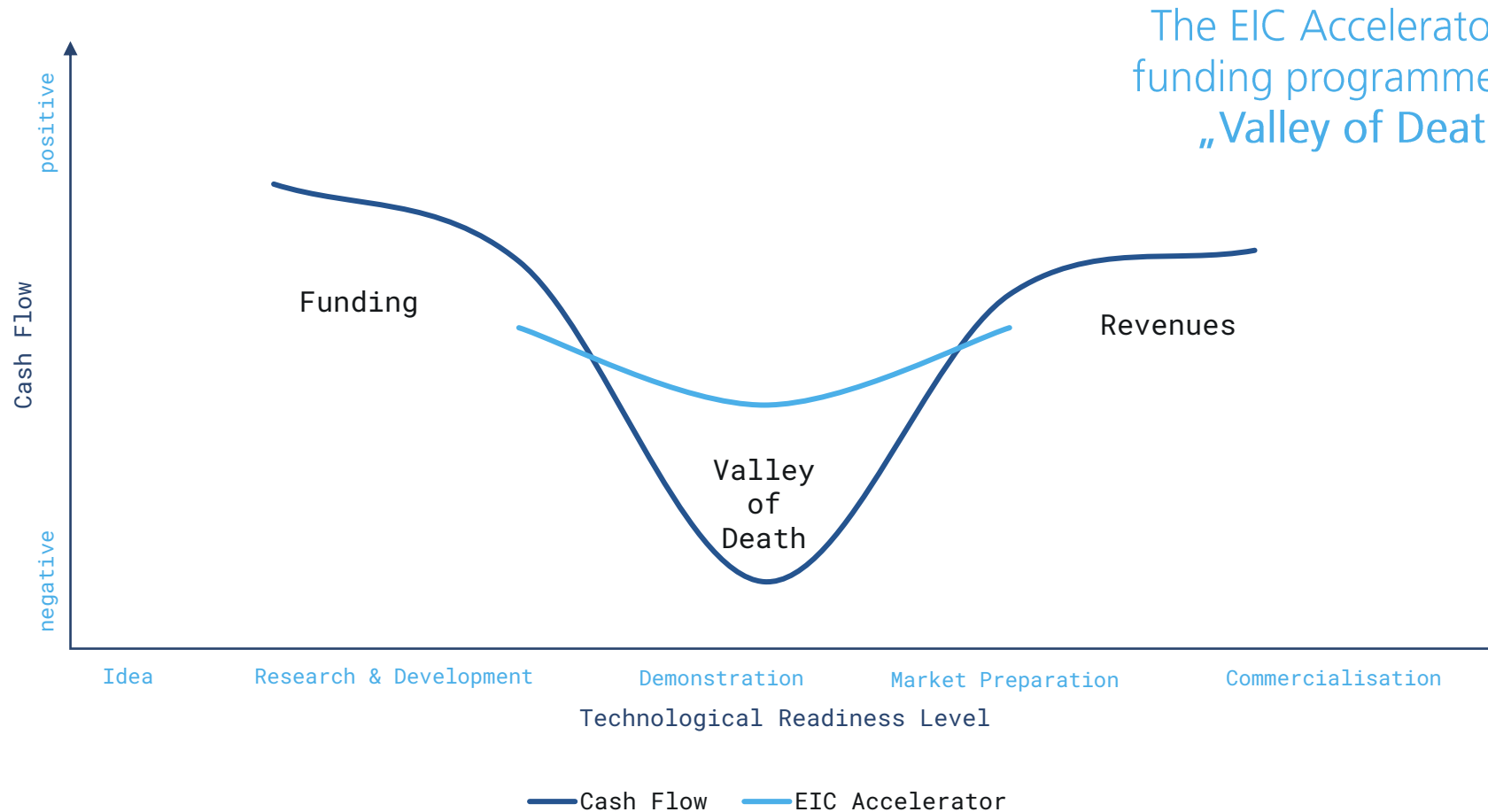
$\leq 4$  Mio. €  
100 %

The background of the slide is a long-exposure photograph of a high-speed train moving through a tunnel. The train is blurred into streaks of light and color, conveying a sense of rapid motion. The perspective is from the front of the train, looking down the length of the tunnel.

# EIC Accelerator

The funding programme to develop and  
scale up game changing innovations





The EIC Accelerator is one of the most demanding funding programmes in the EU. It aims to bridge the „Valley of Death“ between R&D and market preparation.

# Who can apply?

8

## Start-ups and small companies

... with **disruptive innovations** and **clear growth ambitions**. Companies with innovative ideas that trigger radical changes and can **change the market sustainably**.

**Requirement:**  
**Existing Demonstrator (TRL 5/6)**

# What topics are relevant?

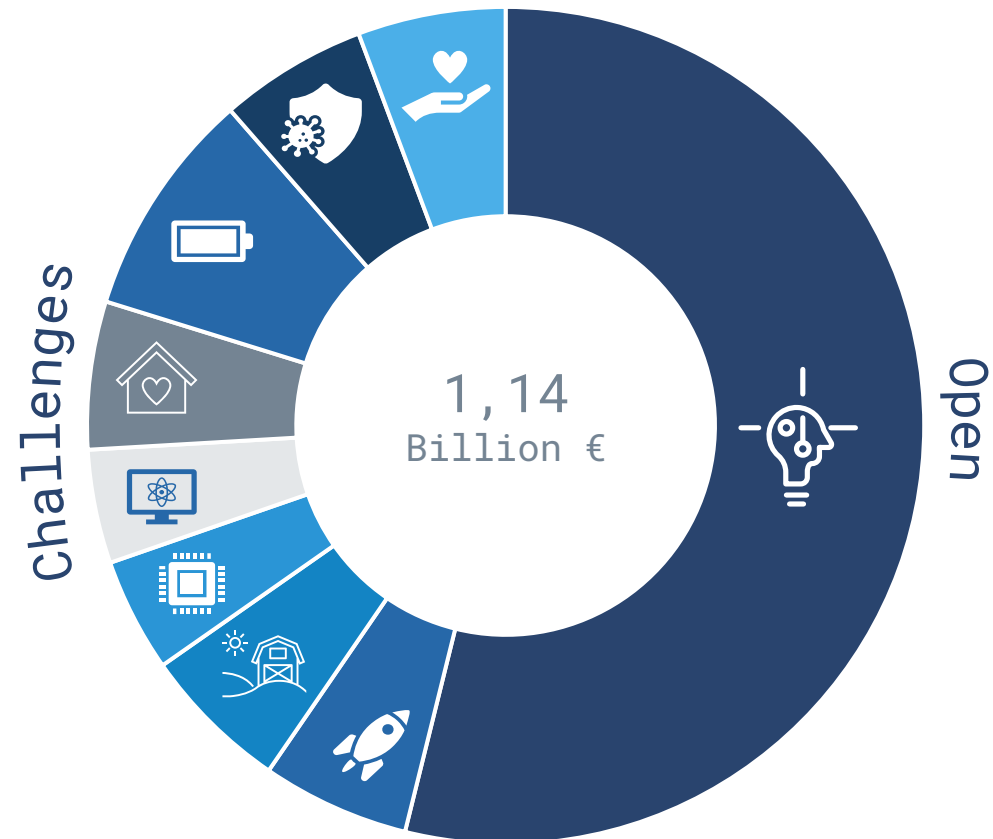
9

The programme is **open to all topics**. In addition, there are **annually changing challenges**. There is a strong focus on **deep tech** innovations and sustainable solutions.

## Challenges 2023

- Biomarker assays for cancer
- Decontamination for pandemic management
- Energy storage
- New European Bauhaus
- Quantum computers and quantum sensors
- Semiconductors
- Resilient agriculture
- Space technologies and services

Budget Distribution 2023



# What are the underlying conditions?

10

Standard: Blended Finance. In special cases, however, sole funding is also possible

## Funding



- Up to 2.5 Mio. Euro
- 70% Funding rate
- Project duration:  
max. 24 months



## Equity



- Up to 15 Mio. Euro
- For 10-24.9% of the  
company shares

# What do you receive support for?

11

## Funding (TRL 5-8)



Close-to-market R&D,  
Demonstration as well as  
Market preparation

- Demonstration & Tests
- Prototyping
- Validation
- „market replication“
- Preparation of scale-up
- Miniaturisation & Design
- Market preparation

## Equity (> TRL 9)



Growth, Scale-Up, Market  
Implementation

- Scale-up
- Marketing & Sales
- Serial production
- Clinical studies

or to cover the necessary own  
contribution to the project costs



# How is funding provided?

12

Total project costs	Direct project costs
Direct project costs	Personnel costs (person-months * gross wage)
+ Overhead (25% of direct project costs)	+ Travel expenses (to customers, trade fairs, partners,...)
+ External services (costs for external service providers)	+ Materials (e.g. for production, tests, marketing,...)
= <b>70% funding of the total project costs</b>	+ Equipment (depreciation during project)

# What makes the EIC Accelerator unique?

13

## Individual company support

Your company will be supported on an **individual basis**. External support can be funded as subcontracts.

## Focus on commercialization

Funding of technical close-to-market developments as well as commercialisation and sales development.

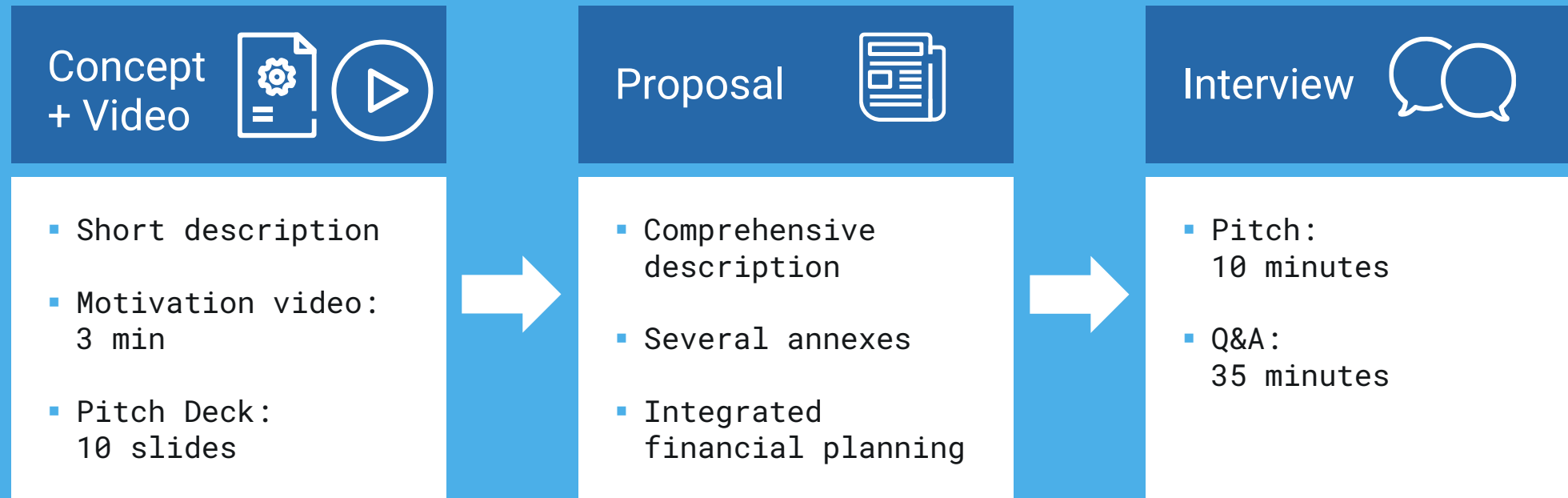
## International market approach

The goal is to support companies in their internationalisation and strong growth.

# What does the application process look like?

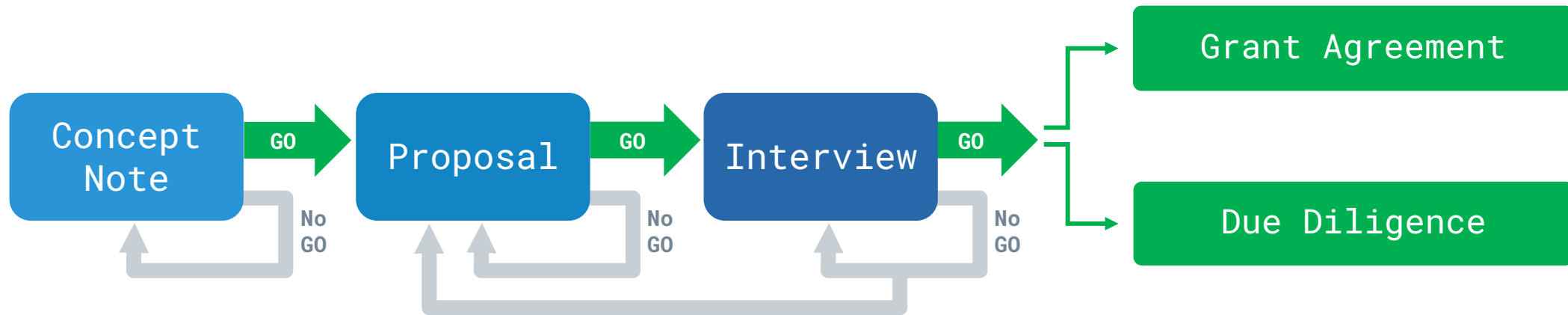
14

## Three-stage procedure



# What does the application process look like?

15



## Important:

If a project receives a No GO in one of the stages for the second time, a new submission to the EIC Accelerator is only possible after 12 months.

# When can applications be submitted?

16

In 2023 there were 4 deadlines, for 2024 not not publicated

Deadlines for application

## Concept Note + Video

- Can be submitted at any time
- Feedback in 3-4 weeks

## Proposal

- 4 Deadlines in 2023
- Feedback in 5-6 weeks

## Interview

- 4 rounds of interviews in 2023
- Feedback in 2-3 weeks

# Aktuelle Informationen zu Förderungen in Deutschland

17

## Haushaltssperre:

- Anträge werden aktuell von den Projektträgern angenommen und bearbeitet
- Es werden aber aktuell keine neuen Bewilligungen ausgesprochen
- Wichtig: Dennoch einreichen! Die Projektträger arbeiten nach dem Prinzip „First in – First out“ -> Irgendwann werden die Bewilligungen dann verschickt

## Neue Abrechnung aufgrund Änderung in AGVO:

- KMU in Deutschland konnten bisher bei der pauschalierten Abrechnung gemäß NKBF 2017, Ziff. 2.4.2 ihre Gemeinkosten mit einem Zuschlag von 100% auf die Personaleinzelkosten abrechnen.
- Gemäß AGVO Art. 25, Abs. 3, a-e ist dies ab 01.01.2024 nur noch dann möglich, wenn der Gemeinkostenzuschlag geringer ist als 20% des Gesamtbetrags der beihilfefähigen Kosten ist. Dies muss der Antragstellende prüfen und belegen.
- Daher nun Preisermittlung aufgrund von Selbstkosten: Die zuwendungsfähigen Einzel- und Gemeinkosten werden dabei durch Ihr Rechnungswesen betriebsindividuell nach den Leitsätzen für die Preisermittlung auf Grund von Selbstkosten ermittelt.
- Wichtig: Dies gilt NICHT für ZIM, da ZIM einzelratifiziert wurde! Wird aber relevant für BMBF-Projekte u.ä.!

THANK YOU

TRL	NASA usage <sup>[4]</sup>	European Union <sup>[5]</sup>
1	Basic principles observed and reported	Basic principles observed
2	Technology concept and/or application formulated	Technology concept formulated
3	Analytical and experimental critical function and/or characteristic proof-of concept	Experimental proof of concept
4	Component and/or breadboard validation in laboratory environment	Technology validated in lab
5	Component and/or breadboard validation in relevant environment	Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
6	System/subsystem model or prototype demonstration in a relevant environment (ground or space)	Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
7	System prototype demonstration in a space environment	System prototype demonstration in operational environment
8	Actual system completed and "flight qualified" through test and demonstration (ground or space)	System complete and qualified
9	Actual system "flight proven" through successful mission operations	Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)