



BRIGAD

**BRIDGING THE GAP FOR INNOVATIONS
IN DISASTER RESILIENCE**

INNOVATOR WELCOME PACK

You are an innovator we are interested in working with!
That is why you received this welcome pack



BACKGROUND

Europe is particularly prone to floods, droughts and extreme weather. Evidence is now ever stronger that climate change will increase damages. Evaluations also show a huge potential to reduce the risks through adaptation strategies.

Although there is no lack of entrepreneurs that develop innovative solutions, only 6% of the European companies are capable of testing and demonstrating their innovations.

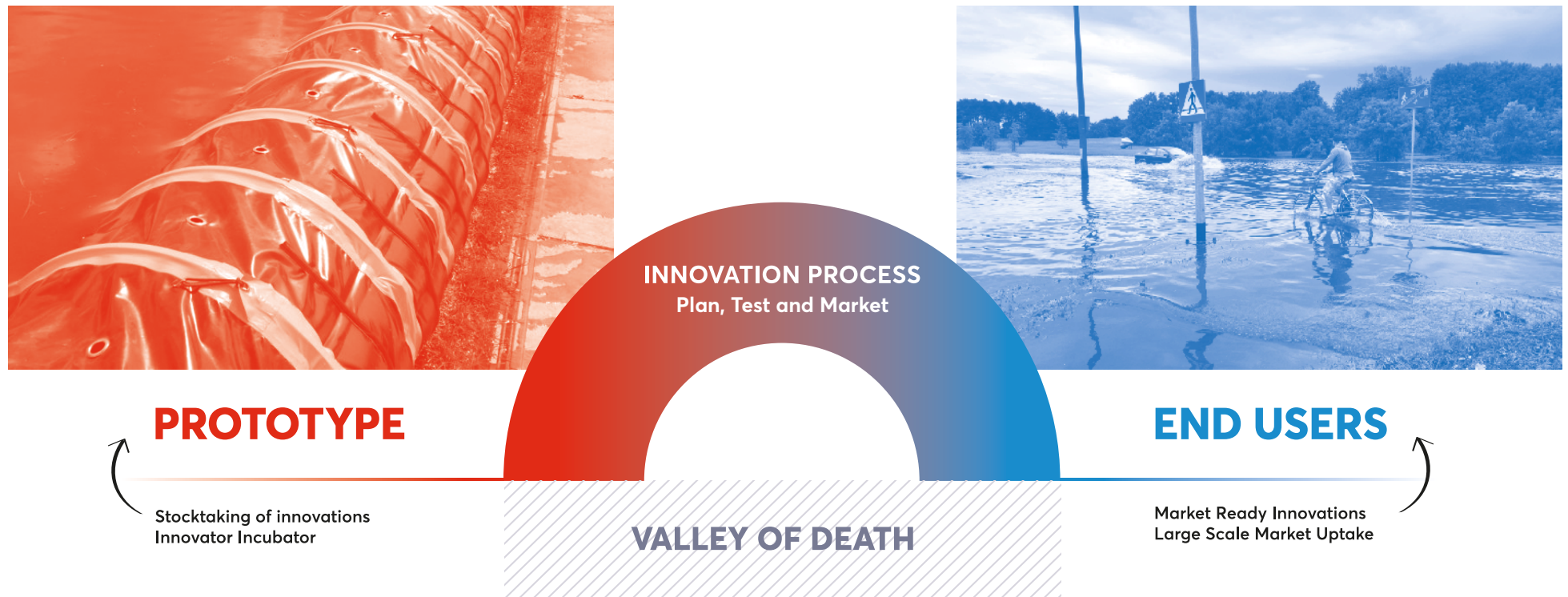
This is often related to a lack of:

- Resources for testing and improving innovations
- Incorporation of end user requirements in the design and business model
- Capacities to identify and engage with wide spread network of potential customers



WHAT IS BRIGAIID?

BRIGAIID is a 4-year project (2016-2020) under EU Horizon2020.
We aim to effectively bridge the gap between innovators and end-users
in resilience to floods, droughts and extreme weather.



WHY YOU?

DO YOU HAVE AN INNOVATION that has the potential to reduce risks from natural hazards such as floods, droughts, storms, rain or wildfires?

ARE YOU EAGER TO IMPROVE YOUR INNOVATION, make it fit with needs of end users, and meet with prospective clients?

If so, you could be interested in
getting involved in our initiative.

BRIGAD!

BRIGAIID FOR INNOVATORS

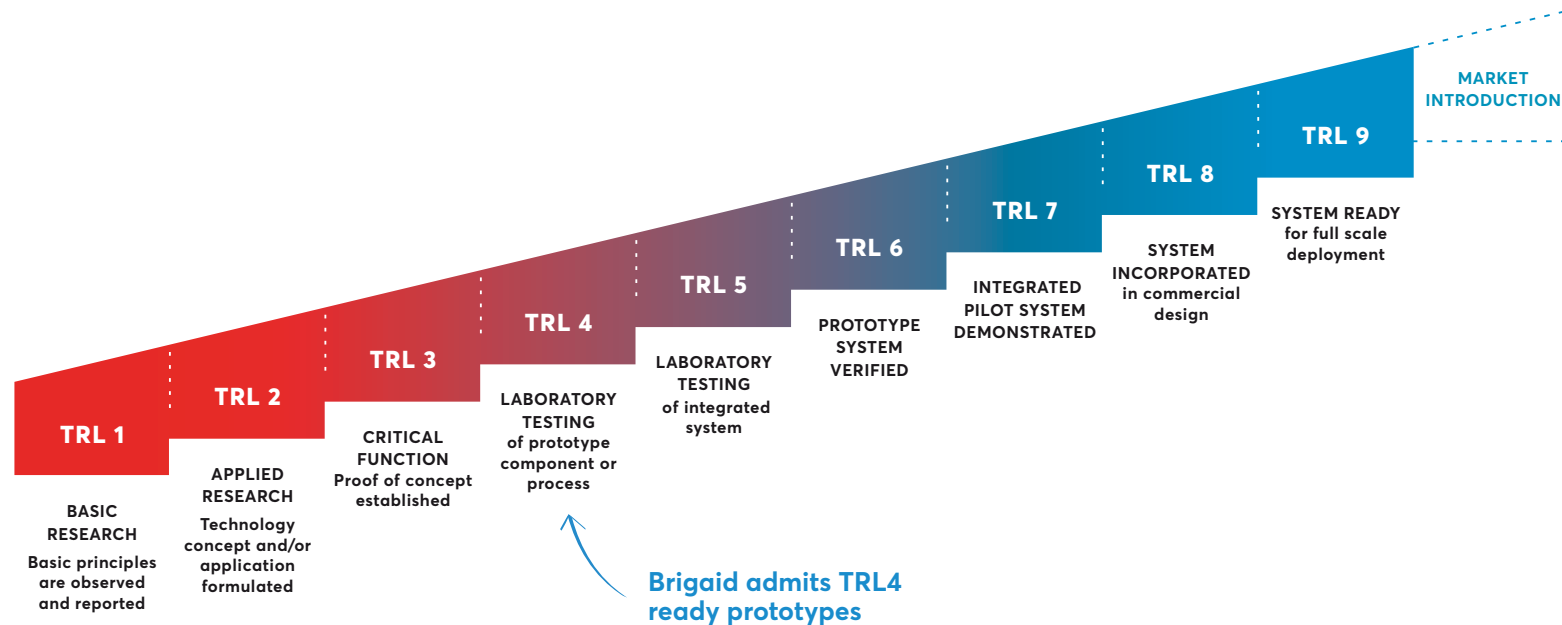
What BRIGAIID basically expects from innovators is passion to push their innovation to the market!

BRIGAIID supports start-ups and SME's who have:

- **Physical solutions:** Structural, software-IT, etc.
- **Social solutions:** Educational, behavioural, etc.
- **Institutional solutions:** Economic, governance, etc.

BRIGAIID seeks solutions that:

- **are aimed to reduce risks** of floods, drought & extreme weather
- **are at least TRL4** (prototype ready for testing)
- **require** further testing and improvement



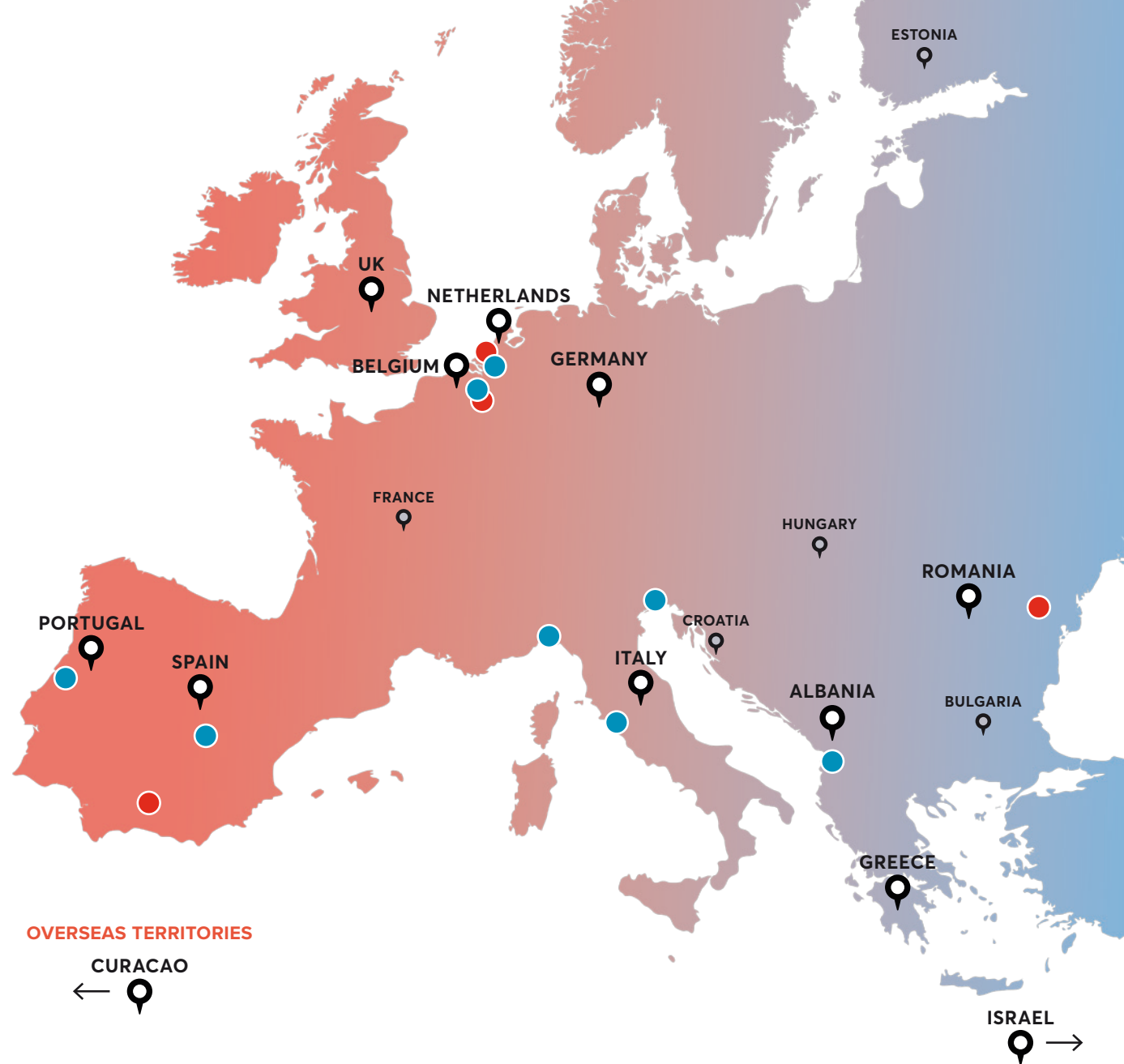
BRIGAD aims to become the quality label for the development of innovations for climate adaptation and risk reduction from climate-related disaster impacts in Europe and beyond.



WHAT IS OUR ADDED VALUE?

BRIGAIID offers state of the art knowledge of climate risk, science-based methods and funding opportunities to improve innovations by:

- Performing tests, evaluating results and making improvements.
- Incorporating needs of clients in the design and business model.
- Putting innovations in the spotlight



BRIGAIID TEST SITES

- Controlled Test & Demonstration Sites
- Operational Test & Demonstration Sites

BRIGAIID PARTNERS

- 📍 Home Country Partner

BRIGAIID SUPPORTING PARTNERS

- 📍 Home Country Partner Support Letter

WHAT DOES BRIGAIID?

The goal is to advance the technical, social and market readiness of innovations simultaneously. This smoothens the development path, because technical, social and market requirements can be incorporated in the design, business model and market approach early on.

LEVEL	DESCRIPTION OF TECHNICAL READINESS	TECHNICAL	SOCIAL	MARKET
Level 1	Basic Research	✓	✓	✓
Level 2	Applied Research	✓	✓	✓
Level 3	Critical function, proof of concept established	✓	✓	✓
Level 4	Laboratory testing of prototype component or process	✓	✓	✓
Level 5	Laboratory testing of integrated system	✓	○	✓
Level 6	Prototype system verified	✓	○	○
Level 7	Integrated pilot system demonstrated	✓	○	○
Level 8	System incorporated in commercial design	○	○	○
Level 9	System ready for full scale deployment	○	○	○
> Level 9	Market Introduction	○	○	○

BRIGAIID supports innovations from TRL 4 to 8:

- **TECHNICAL READINESS:**
resources (knowledge, small funds) for testing and improving innovations
- **SOCIAL READINESS:**
identifying end user requirements, potential social acceptance barriers
- **MARKET READINESS:**
developing a solid business case, putting innovations in the spotlight to attract clients and investors

TECHNICAL READINESS

Technical readiness is the performance and effectiveness of an innovation to reduce climate-related risks, as shown in field tests and operational environments. BRIGAD assists in defining and performing the required tests to improve an innovation.

We provide test guidelines to innovators to identify and advance an innovation's Technical Readiness:

REUSABILITY

The temporary- or permanent-nature of the innovation, measured by whether (parts of) an innovation is designed for single or repetitive use and how durable the structural components of the innovation are. It also provides information about the long-term operation and maintenance requirements over the lifetime of the innovation.

RELIABILITY

The performance of an innovation during a hazard event, related to failure of either:

- **The technical components:**
e.g., failure of a structure.
- **or human / behavioral activities:**
e.g., installing mobile parts.

Reliability is identified through fault tries and evaluated in tests.

TECHNICAL EFFECTIVENESS

The (designed) risk reduction potential of an innovation. In BRIGAD, risk is defined as a function of probability, exposure, and vulnerability.

Risk reduction can be obtained by reducing either:

- **The probability of exposure.**
- **or the consequences of a hazard.**

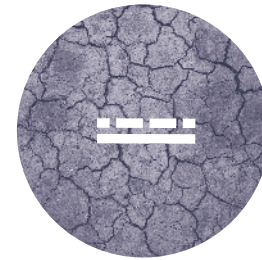
TECHNICAL READINESS

- 1. Innovators evaluate their solution on these three KPIs:**
Reusability, Reliability and Technical effectiveness
- 2. Guidelines are provided for different types of innovations:**
Physical, Social and Institutional
- 3. The outcomes of these assessments are verified in tests**
(if needed) or by documentation material. In case testing is required, a test plan will be developed describing which tests are performed, the testing facility and the costs.
BRIGAD can provide small funds to support these tests.

SOCIAL READINESS

Social Readiness is the extent to which an innovation complies with public and private end users' priorities and needs, as well as the organizational and governance requirements.

The uptake of innovative solutions is often hampered due to a lack of attention in the innovation cycle for the degree to which institutions (policy and decision makers) and societies would want to implement an innovation. Hence, social evaluation is best not left as a filter at the end of the development of a technology, but should accompany and provide input to the choices made along the way, and be accounted for in defining the organizational and institutional needs.





MARKET READINESS

Market Readiness is the potential of an innovation to develop a solid business case and attract investors.

BRIGAID performs an assessment of the different geographical regions within Europe on the basis of their vulnerability to climate change and the willingness of their societies to implement (innovative) adaptation measures with you.

Based on this information, innovators will be guided in developing their business case:

MARKET ANALYSIS

Innovators will be supported in applying a structured suite of market analysis tools (the web based tool box “MAF+”) to further define and segment the market for their innovation.

This will endorse the innovator with the necessary know-how to evaluate the attractiveness of each target segment on the basis of, inter alia, market size and growth rate calculation and competitive analysis.

FUNDING

To make a financially solid business case, BRIGAID will assist the innovator in identifying additional funds for further development of the innovation and guide the submission of funding applications, if required.

MARKET OUTREACH

BRIGAID will support the market outreach of innovations through the specific involvement of end-users and the creation of the online platform: BRIGAID WINDOW.

This climate innovation sharing platform will be the meeting place and “virtual” shopwindow for innovations and investors, and will be released in May 2017. Additionally, BRIGAID will develop marketing material (e.g., pitch decks) and disseminate this material to target groups.

WHAT HAPPENS WHEN YOU ENGAGE WITH BRIGAIID?

1. REGISTRATION

You will be offered to register your innovation in the online platform BRIGAIID Window.

BRIGAIID will actively bring this platform to the attention of potential end users and investors across Europe. Registering your innovation means you will fill out a short questionnaire to describe your innovation.

2. SUPPORT

BRIGAIID will ask registered innovators if they are interested in support for further testing and marketing their innovations.

Innovations will be selected at three points in time (jan '17, dec '17, nov '18). In this selection procedure we will ask additional questions to identify the potential impacts of the innovation (e.g., damage reduction) and the required support (testing facility, funds).

3. TEST PLAN

Selected innovators will be asked to develop a test plan, under the guidance of BRIGAIID partners.

The test plan follows a format to make sure that all required tests are performed in order to improve the technical, social and market readiness simultaneously.

4. EVALUATION AND GUIDANCE

Test results will be evaluated, further needs will be identified and guided if possible:

Submitting funding applications, improving the business plan, etc. Under the guidance of BRIGAIID partners, updates to the innovation may be proposed and support provided to the re-evaluation of the extended innovation.

The innovation will be promoted at EU level.

BRIGAIID'S **WORKFLOW**

Brigaid's planned cycles



Cycle's Process



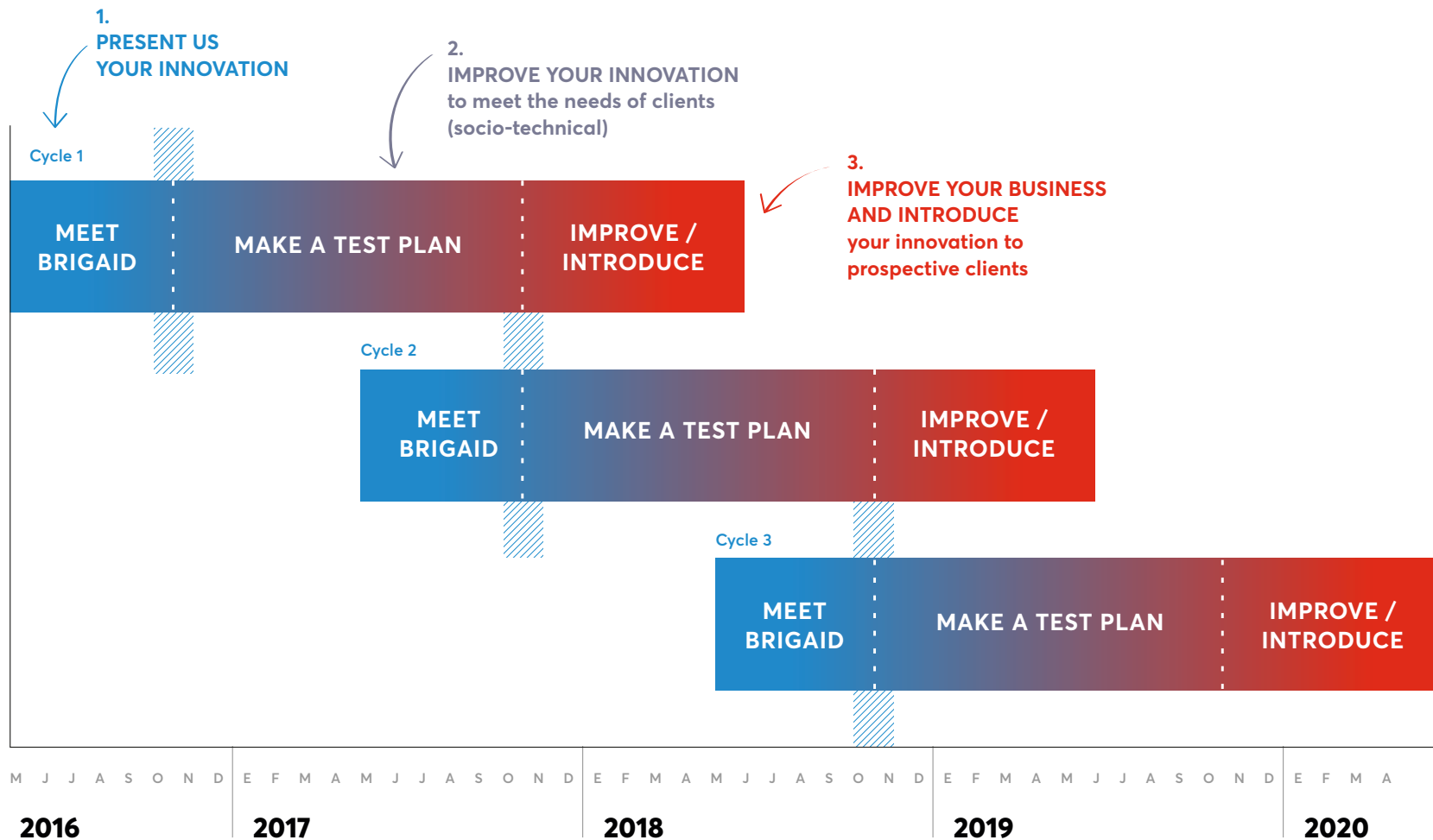
Cycle's Phases



↑
Developed Solutions (TRL4-5)
by Brigaid partners and by
external innovators



BRIGAIID'S TIMELINE



 Selecting innovations for testing



BRIGaid

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www.brigaid.eu

#brigaid #H2020 #EASME



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