# COVER

Being safe around collaborative and versatile robots in shared spaces

safearoundrobots.com

**Action:** H2020 ICT-2017-27c – Robotics Innovation action

**Duration**: January 2018 – December 2021

**Budget**: €10.7M

DANISH TECHNOLOGICAL INSTITUTE

Fraunhofer IFF

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Roessingh Research and Development

Istituto di Tecnologie Industriali e Automazione

# Ambition

*Perimeter :*
***robot technology** sharing space with humans*

*<u>excluded</u>: drones, autonomous road vehicles, military use, intracorporeal*

*Application domains :*

- *Manufacturing*
- *Logistics*
- *Rehabilitation*
- *Agriculture*

- **Significantly reduce the complexity** in safety certifying cobots.
- **Establish open COVR toolkit** to determine exactly which validation procedures are necessary for safety certification.
- **Develop testing protocols**
- **Create network of cobot test hubs** across Europe.

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# SHARED SAFETY FACILITIES

= COVR partners

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→ extension (after the H2020 project)

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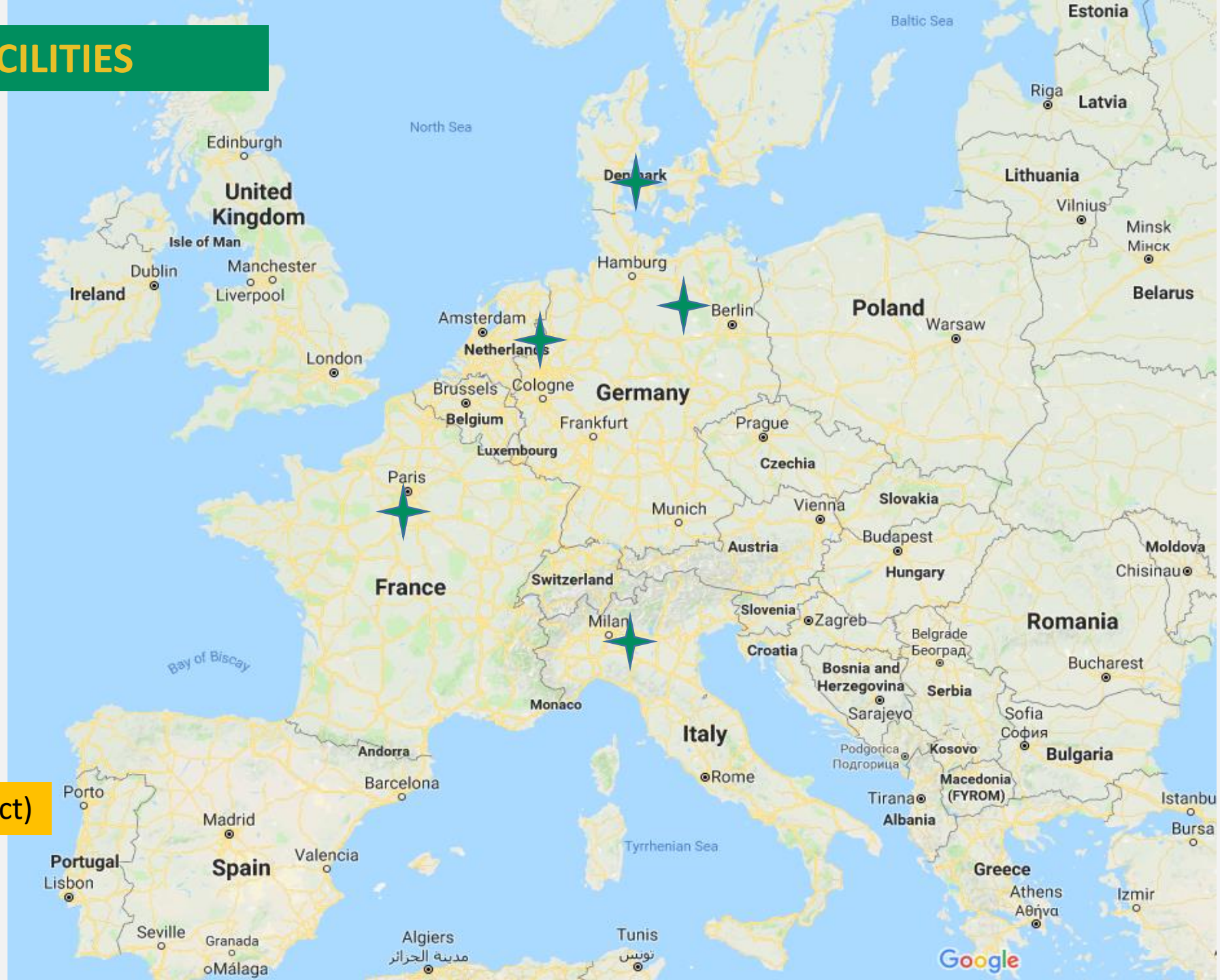

# FSTP OBJECTIVES

**To support the development, certification and deployment of a cobot or cobot integration**

by increasing

its perceived and/or real safety

- **Test and measure safe limits**
- **Develop technology**
- **Develop testing protocols and methods**

**Beta-test and enrich the COVR toolkit and testing protocols**

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- **5M€ in financial support** to 3rd party cobot development
  - 60k€ maximum per project/entity
  - 100k€ maximum per entity when in several projects
- **Access** to **shared safety facilities (SSF)** at partner sites
- Access to **COVR Toolkit** in its current version

❖*Eligibility:*

*legal entity based in an EU Member State or associated country individually or in a consortium*

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- **Design and installation of pilot cobot systems** (up to TRL 8)
  - including hazard identification and elimination, risk assessment and reduction
  - including safety evaluation and testing on the (industrial/rehab.) field
- **Development of safety systems**
  - including redesign, design improvement for safety
  - including lab and/or field tests
- **Development of a cobot, collaborative robot**
  - including development and testing of safety functions

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# AWARD Requirements

- Attend a COVR workshop
  - toolkit introduction
  - protocols introduction
- Document their experience
  - Continuous communication with ARP
  - End-of-experiment report
- Contribute to COVR elements improvment
- Present their experience in one COVR event
- Support COVR making of dissemination material
  - including videos

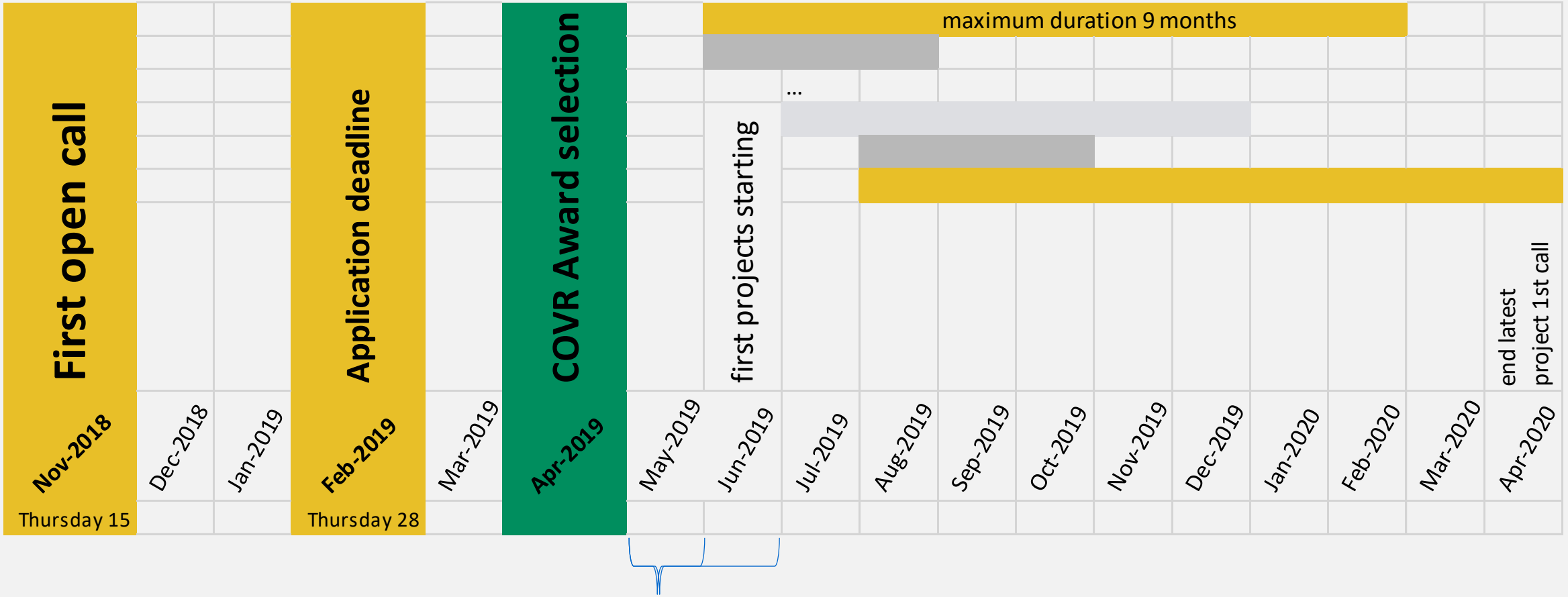
+ funding rules

+ SSF safety and internal rules

- Impact / COVR objectives
- Quality of work described
- Technology readiness

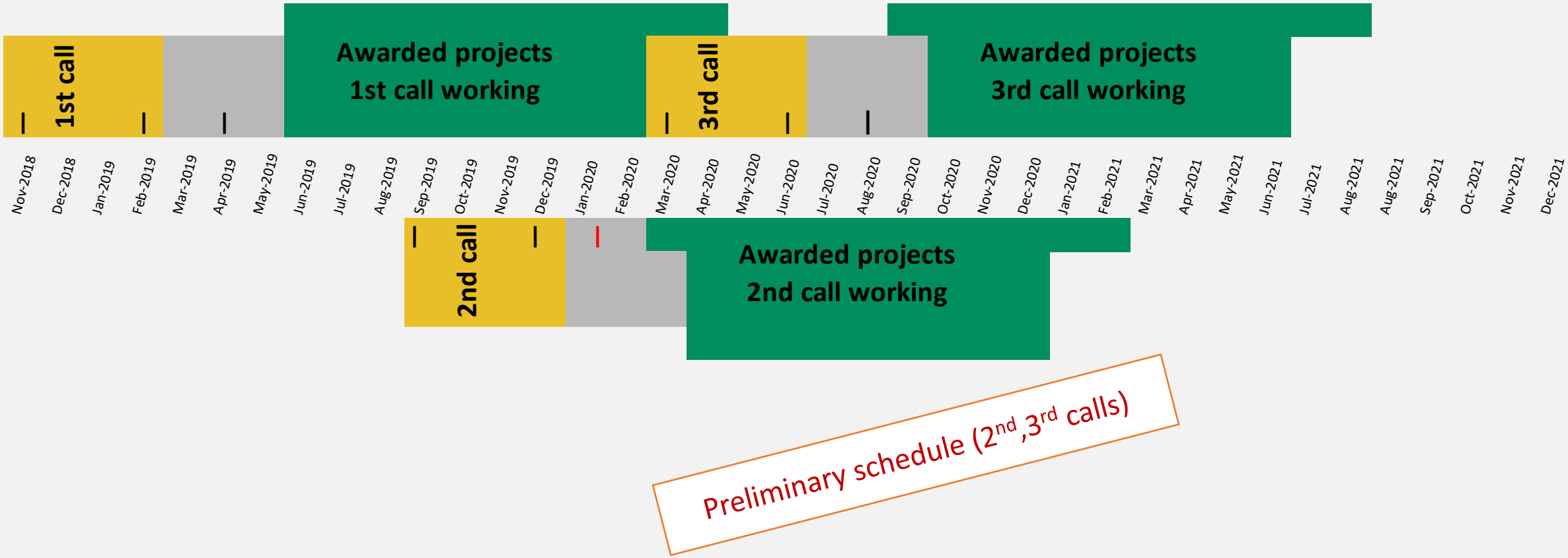
- Coverage constraints
  - Use Toolkit in its version: Manufacturing (1st), rehabilitation (2nd),
  - Robot abilities → COVR protocols
  - Type of human-robot collaboration, technologies
  - Application domain: manufacturing, rehabilitation, logistics, agriculture

# FSTP TIMELINE 1st call




*Contract with ARP (Award Responsible Partner)*

# FSTP global TIMELINE




Preliminary schedule (2nd,3rd calls)

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*More information ?*

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