



# The experience of the European Robotics Challenges

3rd Workshop on Robot Competitions, Challenges and Benchmarking

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[www.euroc-project.eu](http://www.euroc-project.eu)

# The Motivation

The European manufacturing industry needs competitive solutions to keep global leadership in products and services



## **EuRoC project**

- Question the status quo
- Showcase potential of robotics challenges
- Develop innovative products and services

call: FP7-2013-NMP-ICT-FoF(infso)

## Three industry-relevant Challenges



**Reconfigurable Interactive  
Manufacturing Cell**  
(human-robot interaction)

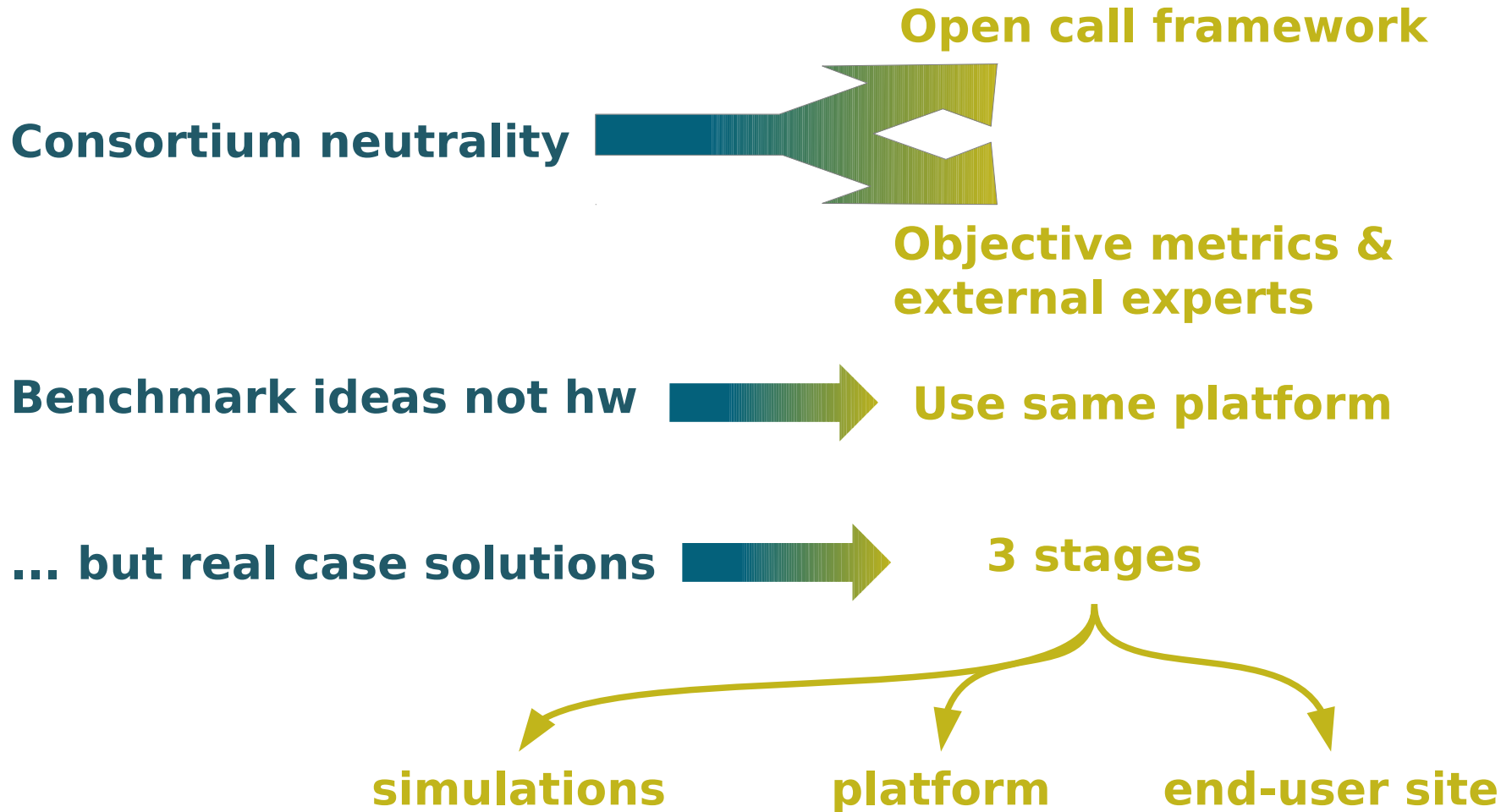


**Shop Floor Logistics  
and Manipulation**  
(mobile manipulation)



**Plant Inspection  
and Servicing**  
(aerial robotics)

# Main aspects



# Main aspects



**Partners provide  
technical and  
scientific support**

**Are we reinventing the wheel ?**

**Facilitate know-how flow  
from academia to industry**

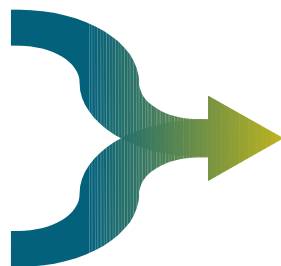


**Active and joint  
participation of both**

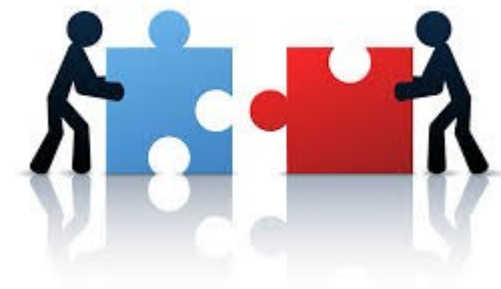
# Main aspects

**A good idea looking for  
an application**

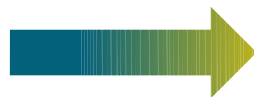
**An application looking  
for a solution**



**Consortium helps  
in match making**



**A team has the perfect  
solution only for a subtask.  
Are we going to loose it?**



**“Hirings” possible from  
second to third stage**

# Main aspects

**How do we guarantee real commitment from challengers?**  
(aka: not only a team of undergraduate students...)



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**Increasing financial  
support proportional to  
the complexity/stages**



**midterm evaluation in the  
second stage**

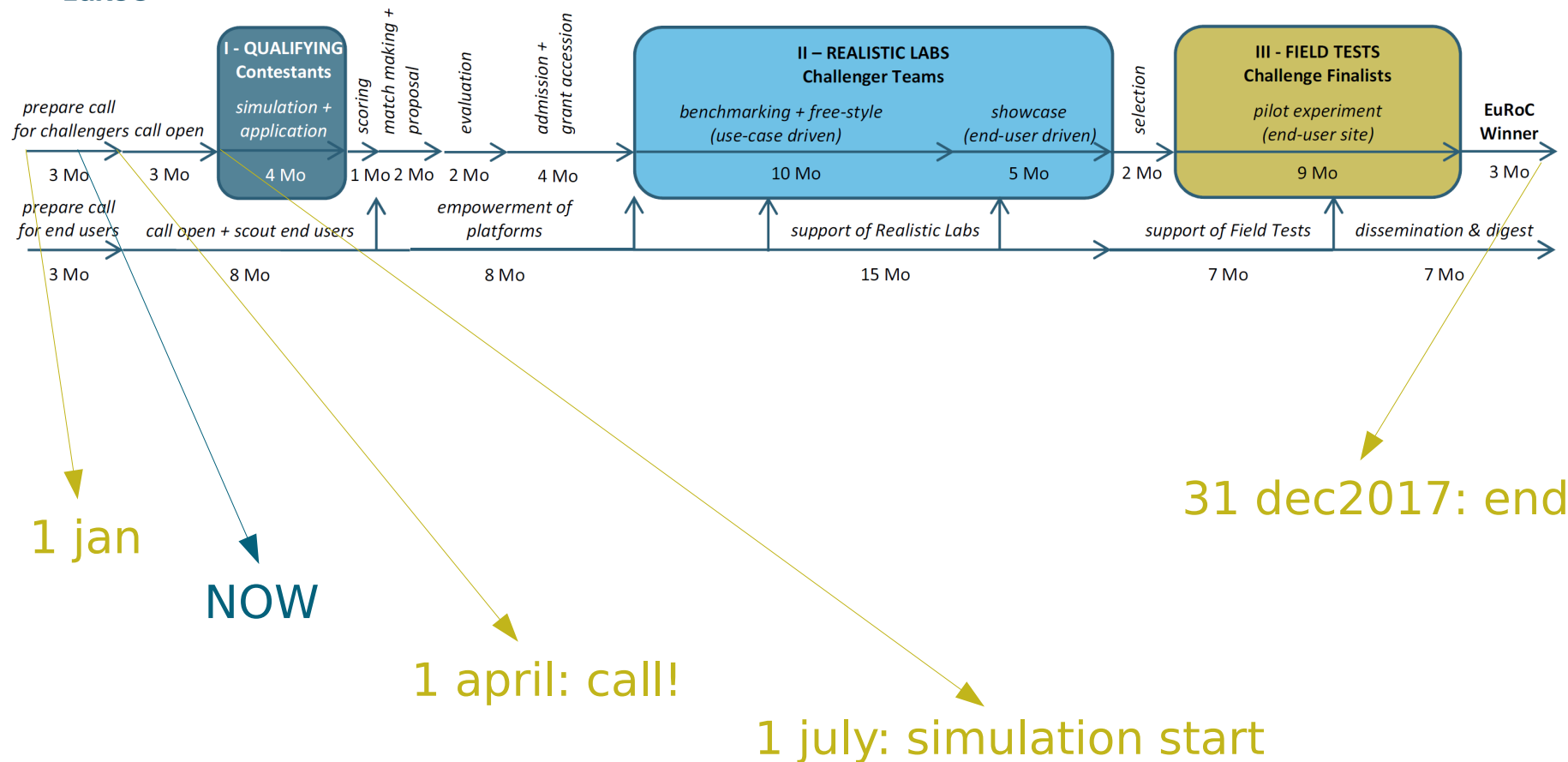
**Involvement in public  
events (midterm in  
Automatica 2016)**



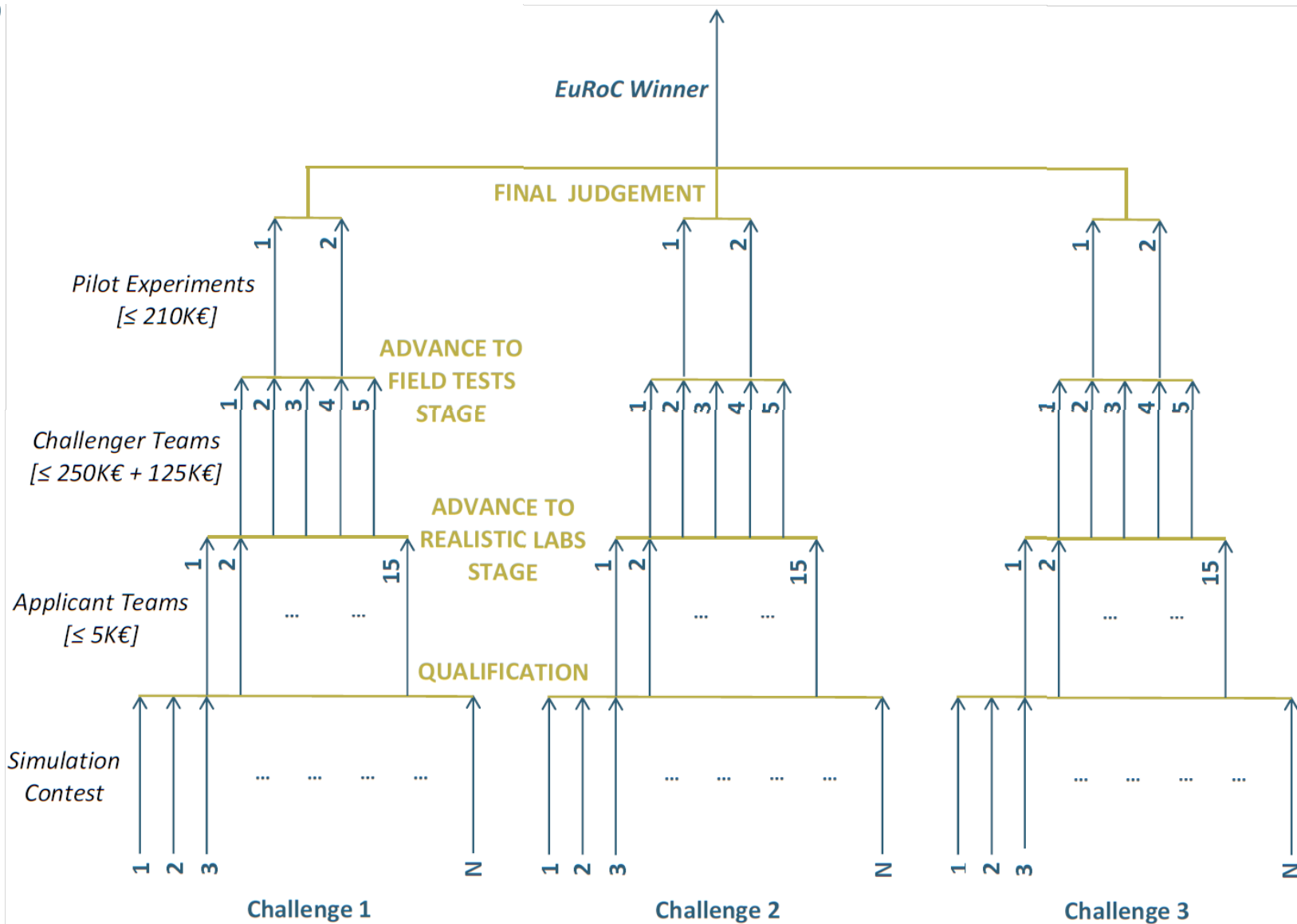
1. Explain Newton's First Law of Motion in your own words.



# Where we are?



# The Challenge Chart



# The Project Lures

## 1. Cumulative sum of € 7 M grant money available to the Challengers

- 30 Teams will receive up to € 5 K each in the first stage
- 9 Teams will receive up to € 375 K each in the two stages
- 6 Teams will receive up to € 585 K each in the three stages

## 2. Added value of the challenge experiments

- Benchmark new algorithms and solutions on three first-class European hosting platforms
- Test algorithms them at end-user site in the final stage
- Open access to platforms
- Full support from local hosts and end users
- Financial support available to cover personnel and travel/lodge costs

## 3. Formation of Challenger teams

- Gain business experience
- Great networking opportunities

## www.euroc-project.eu



The screenshot shows the homepage of the EuRoC website. At the top, there is a dark blue header with the EuRoC logo on the left and a search bar on the right. Below the header is a navigation menu with links: Home, Project, Consortium, Challenges, EuRoC Call, Public Relations, and Related Activities. The main content area features a large yellow banner with the text "Welcome to the European Robotics Challenges" and a quote: "The European manufacturing industry needs competitive solutions to keep global leadership in products and services." Below this, there are three featured images with captions: "Reconfigurable Interactive Manufacturing Cell", "Shop Floor Logistics and Manipulation", and "Plant Inspection and Servicing". To the right of the banner, there is a section for "Partner of I4MS" with the text "ICT Innovation for Manufacturing SMEs" and a link to "www.i4ms.eu". Below this is a "News" section with a date "17.10.2013" and the title "EuRoC@I4MS". The news text describes a meeting of representatives of all projects involved in the I4MS initiative in Brussels on the 11th of October to discuss joint market visibility, synergies among projects etc. At the bottom of the news section, there is a link "In the... read more" and a link "go to news archive".

# Interested?

Details on the project today at 12.00 in the workshop **"Additional Funding opportunities"** (track 1)

Further questions to:

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# European Robotics Challenges



Eu Robotics Forum, Rovereto, 13 march 2014