ATTRACT
COMPASS Technical Board Meeting

Johannes BERNHARD (EN-EA) 03.09.2018
ATTRACTION Fact Sheet

- Initiative using EC funding to promote early stage development of next generation detection and imaging technologies
- Phased approach: If approved, Consortium first funds 170 early-stage ideas in Phase-1 through its own Open Call
- CERN is eligible also to apply for this funding
- Selected projects then present their results a year later for further scale-funding as part of Phase-2
- Sequence repeated several times in so-called Maxi-ATTRACTION as of FP9 in 2021+
- Focus is on new ideas or clever combination of existing technology, requiring a consortium of at least 2 from academia, institution, private sector
- Call is open in August with a deadline of 12th October 2018, decision by March 2019. If accepted, financing for one year
- CERN internal deadline: end of next week (if you would like a CERN group in your consortium)
Environment

Focus on detection and imaging technologies
**Environment**

![Graph showing the ATTRACT quadrant co-innovation paradigm]

**ATTRACT’s quadrant co-innovation paradigm**

Scientific research that both seeks fundamental understanding of scientific problems, and, at the same time, benefits to society.

**Sources:** Donald E. Stokes, *Pasteur's Quadrant – Basic Science and Technological Innovation*, Brookings Institution Press, 1997.
Roadmap

1. 2018
   - 20 M Euros EC fund (Attract phase 1)
   - Seed funding of 170 breakthrough projects.

2. 2019
   - Attract Phase 2 (scale funding of selected projects out of 170)
   - Preparation for new EC proposal (H2020)

3. 2020
   - Attract Phase 2 starts

4. 2021 and beyond
   - Scale-up Public-Private Capital Model
## Some Examples

<table>
<thead>
<tr>
<th>Industrial Sector</th>
<th>Examples of ATTRACT fields of contribution</th>
<th>ATTRACT Technological Examples</th>
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</thead>
<tbody>
<tr>
<td>ICT</td>
<td>Optoelectronics, Communications, Computing, Micro-nano electronics, MEMs, Connectivity and Data Traffic, etc.</td>
<td>Radiation hard sensors and Systems.</td>
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<tr>
<td>Energy</td>
<td>Intelligent Energy Production and Management (Grid), Renewable Technologies, Real time Power Plant monitoring, etc.</td>
<td>Big Data analysis and management hardware and software systems.</td>
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<td>Aeronautics</td>
<td>Advanced Materials, Air Traffic Control, Structural Monitoring, etc.</td>
<td>Data Transmission and Encryption (Software and Hardware Systems).</td>
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<tr>
<td>Medical</td>
<td>Medical Imaging, Radiation Therapy, Big Data Acquisition and Management, Dosimetry, Drug Discovery, Telemedicine, etc.</td>
<td>Data Traffic Algorithms.</td>
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<tr>
<td>Robotics</td>
<td>Industrial and civil robotics, human-robot interaction, Sensing, Perception, Cognition, etc.</td>
<td>Computed Tomography.</td>
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More information

- ATTRACT web page: https://attract-eu.com/
- Information session on ATTRACT: https://indico.cern.ch/event/728232/
- LinkedIn: https://www.linkedin.com/company/attract-eu

Disclaimer: Parts of this presentation were taken from M. Norberg’s presentation on May 23rd.
Thank you!