Promoting and Spreading Research Excellence: Perspectives from the European Association for Cooperation in Science and Technology (COST)
COST - 45 years proven track record in research collaboration

37 COST Countries:
Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the former Yugoslav Republic of Macedonia

The countries in blue are the less research-intensive COST countries, also know as inclusiveness target countries (ITCs)

1 Co-operating State:
Israel

Near Neighbour Countries:
Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Kosovo*, Lebanon, Libya, Moldova, Morocco, the Palestinian Authority, Russia, Syria, Tunisia and Ukraine

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.
COST key figures of 2017

- **Running Actions**: 339
- **Training schools**: 233
- **Average annual budget of a COST Action**: €134,000
- **Short-term scientific missions**: 2,339
- **Researchers involved in COST Actions**: 45,000
- **COST budget (from Horizon 2020 for a 7 year period)**: €300 million

**COST**: The networking tool in the ERA and the pre-portal to other ERA funding schemes
Role of COST in the ERA – 3 Strategic Priorities

1. Promoting and spreading excellence
2. Fostering interdisciplinary research for breakthrough science
3. Boosting careers young researchers
Promoting and spreading excellence

Everyone benefits
Promoting and spreading excellence

Average participation in COST Actions, ITCs and other countries

- Other countries
- Inclusiveness Target Countries
Fostering interdisciplinary research for breakthrough science

“Industry needs to cooperate with academia just like in COST networks. Over there, knowledge transfer and getting results to industry happens in real time.”

Mark de Boevere, Managing Director, Pulsemaster (SME), The Netherlands
Boosting careers of young researchers

"I always say that I have learnt more in these 3 years in COST than I would have in 10 years of my career."

Dr Lara Pajewski, Researcher, Engineering Department, "Roma Tre" University, Italy.
Boosting careers of young researchers
Boosting careers of young researchers

Researchers’ career development and complementary funding schemes

- Erasmus+
- MSCA
- Post-Docs
- ERC Starting Grant
- ERC Consolidator Grant
- ERC Advanced Grant

Students → Post-Graduates →Assistant Professor / Associate Professor → Full Professor

Bottom-up networking schemes
COST as pre-portal to ERA

<table>
<thead>
<tr>
<th>Horizon 2020 applications reported by finished COST Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Actions with finished Final Action report</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>62</td>
</tr>
</tbody>
</table>
Lithuanian presence in COST Actions

<table>
<thead>
<tr>
<th>Year</th>
<th>Lithuanian Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>145</td>
</tr>
<tr>
<td>2014</td>
<td>170</td>
</tr>
<tr>
<td>2015</td>
<td>174</td>
</tr>
<tr>
<td>2016</td>
<td>202</td>
</tr>
<tr>
<td>2017</td>
<td>203</td>
</tr>
</tbody>
</table>
Example of COST success stories

- COST Action FP1106
- Running from 23/04/2012 – 22/04/2016
- STReESS - Studying Tree Responses to extreme Events: a Synthesis
- Lead to establishment of new research facility, the DendroLab Novi Sad, Serbia
Example of COST success stories

- Czech Republic and Switzerland provide additional national support to COST Action participants

- Budget is available for
  - Personnel cost of staff assigned to the project (focus on PhD)
  - Cost of new equipment
  - Cost of sub-contracting
  - ...

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How it works?

COST Action participants nominated by COST National Coordinators

Main proposer
- Portugal
- Belgium
- Russia

Secondary proposers
- France
- Germany
- Italy
- Greece

- Spain
- Denmark
- Romania
- Israel
Implementing COST’s Strategic Priorities

COST Actions
- COST Academy
  - Meetings, workshops, and conferences, and conference grant
- COST Innovators Grant
- COST Connections
- COST Science-informed policy advice
- Dissemination activities
- Short-term Scientific Missions
- COST global networking

COST
- COST Academies
  - Training schools
  - COST Innovators Grant
  - COST Connect
  - COST Science-informed policy advice
  - Dissemination activities
- Short-term Scientific Missions
- COST global networking
Key Messages

- COST is committed to promoting and spreading excellence all over Europe and beyond, while …
  - fostering interdisciplinary research for breakthrough science, and
  - boosting careers of young researchers.

- COST will strengthen its role in the ERA by …
  - expanding COST Actions, and
  - providing added value services to COST participants
Thank you!

www.cost.eu
Impact through Networking
Why Research and Innovation Networks?

- Knowledge sharing leads to…
  - Common understanding of problems at hand
  - Coordinated activities
  - Pooling resources
  - Reduced risks
  - Synthesis and re-combination of spread pieces of knowledge
  - Synergies (1+1>2)
Core policies within the COST Actions

Excellence and inclusiveness (widening the European research base)

- Strengthening the excellence through cross-border networking of researchers
- Promoting geographical, age and gender balance throughout its activities and operations

Specific objectives

- International cooperation (mutual benefit, NNC, …)
- Industrial dimension (dedicated dissemination and exploitation activities)
COST Inclusiveness Target Countries

Inclusiveness Target Countries (ITCs).

Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Turkey, and the former Yugoslav Republic of Macedonia.

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COST Near Neighbour Countries

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Dedicated measures for active ITC participation

COST Info Days
• Targeted to ITC
• combined with high-level meeting ITC government, including NCP

Proposals
• Eligibility
• External experts
• Inclusiveness policy

COST Actions
• COST Action Leadership
• Conference grant for PhD students and young researchers
• Pre-payment for STSM

COST Academy
• Leadership workshop
• Finance/Admin workshop
• Science Communicaton training
• Mentoring GH
• Mentoring Chair
Participation of International Partner Countries in COST Actions

- Invited as individual experts in a specific research field
- Access to the brightest minds
- Creates access to new, local markets
- Often the first entry-point to European collaborative research

Network driven means for participation
Reasons for participation of SMEs: Network and information driven

- Participation of SMEs allows COST Actions to:
  - To widen the network
  - To close the TRL gap
  - To have access to new perspectives and knowledge
  - To get insights in real-life applications
  - To redefine research questions
  - To facilitate access to policy-makers (Business Associations)
COST Impact Model

**Impacts**

- Scientific impact: interdisciplinary collaborations leading to breakthrough science
- Societal impact: bridging the innovation divide and participation gaps, and brain circulation in the ERA

**Outcomes/results**

- Approved common research projects on interdisciplinary research
- Coordination of standards, procedures and methods
- New research infrastructure and programs on societal challenges
- Career advancement for less-connected researchers

**Output**

- H2020, European and national common research proposals
- Peer-reviewed co-created publications
- New (interdisciplinary) research collaborations for researchers
- New research leadership skills and experience for less-connected researchers

**Activities**

**Networking**

**Input**

**Ideas**

**Resources**

**People**
COST in Horizon Europe

- Horizon Europe proposal published on 7 June 2018
  - COST in the “Sharing Excellence” pillar, together with Teaming, Twinning and ERA Chairs
  - EUR 1 700 000 000
  - “This intervention area will support the Horizon Europe specific objectives: Spread and connect excellence across the EU; Reinforce the creation of high quality knowledge; Increase cross-sectorial, cross-disciplinary cross-border cooperation.”