

AN INTRODUCTION TO COST



Judith Litjens
Policy Officer at the COST Association



Chapter 1

About COST & Strategic Priorities



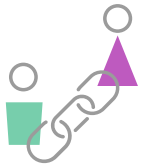
European Cooperation in Science & Technology

COST provides networking opportunities for researchers and innovators in order to strengthen Europe's capacity to address scientific, technological and societal challenges



ALL FIELDS OF S&T

(mono- or interdisciplinary,
new and emerging fields)

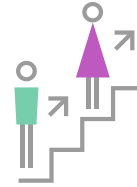


ALL PARTNERS

(academia, public organisation, industry,
NGO, International Organisations)



BOTTOM-UP APPROACH



ALL CAREER STAGES

(young and experienced researchers)



ALL COUNTRIES

- 41 COST Members
+ 1 Cooperating Member
- 16 Near Neighbour Countries
- Global cooperation

OPEN BY NATURE

COST Membership

41 Members

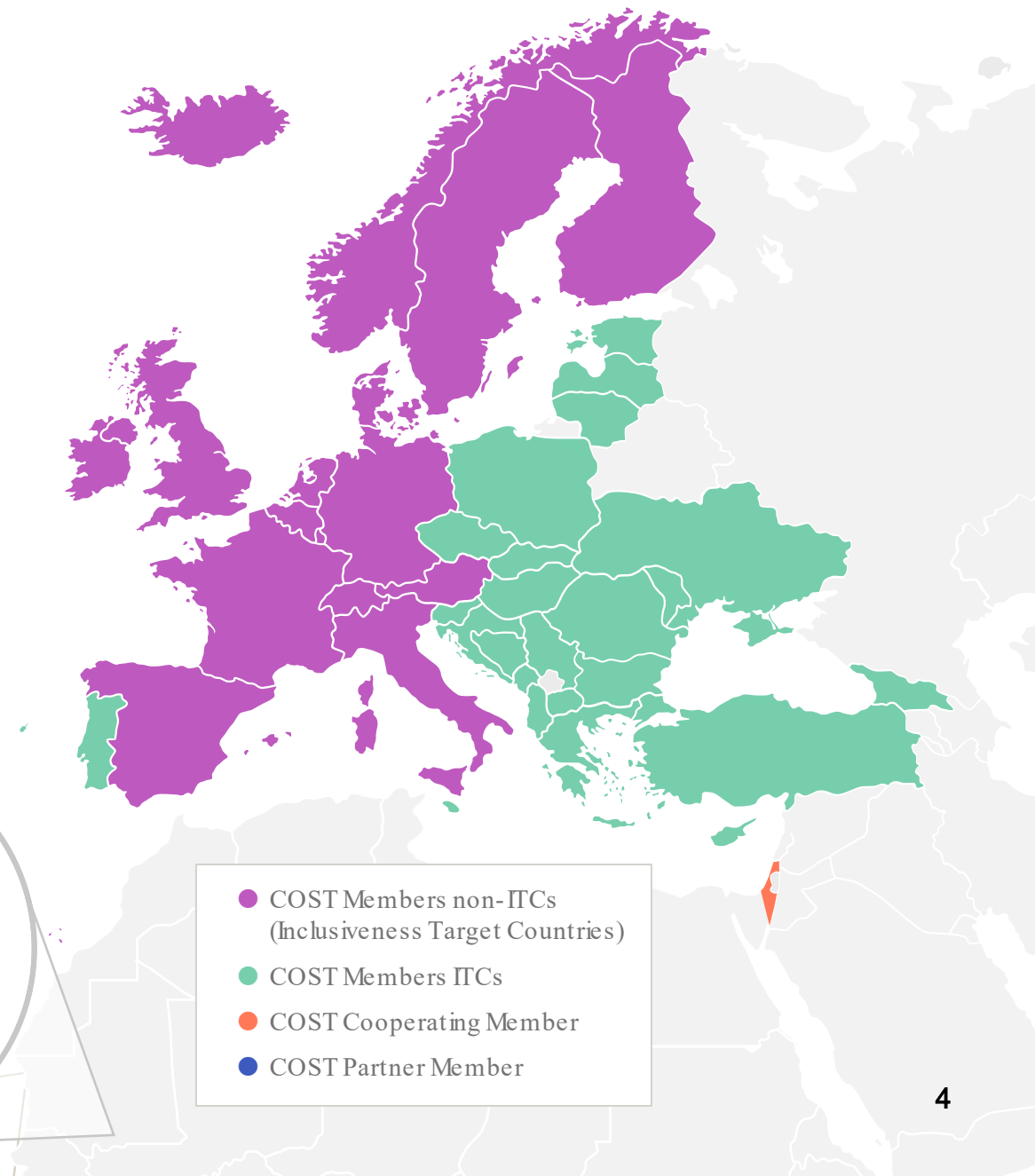
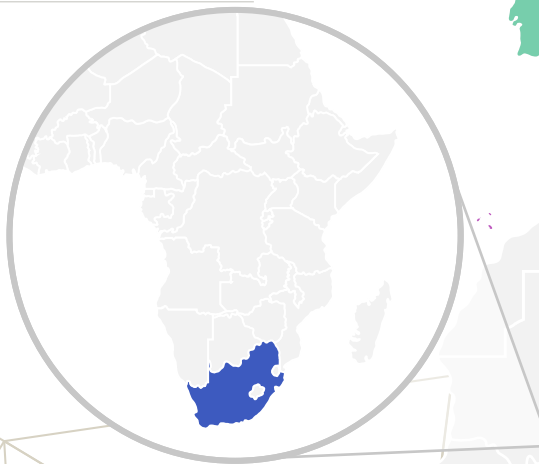
- | | | |
|--------------------------|-----------------------------------|------------------|
| ● Albania | ● Greece | ● Norway |
| ● Armenia | ● Hungary | ● Poland |
| ● Austria | ● Iceland | ● Portugal |
| ● Belgium | ● Ireland | ● Romania |
| ● Bosnia and Herzegovina | ● Italy | ● Serbia |
| ● Bulgaria | ● Latvia | ● Slovakia |
| ● Croatia | ● Lithuania | ● Slovenia |
| ● Cyprus | ● Luxembourg | ● Spain |
| ● Czech Republic | ● Malta | ● Sweden |
| ● Denmark | ● The Republic of Moldova | ● Switzerland |
| ● Estonia | ● Montenegro | ● Turkey |
| ● Finland | ● The Netherlands | ● Ukraine |
| ● France | ● The Republic of North Macedonia | ● United Kingdom |
| ● Georgia | | |
| ● Germany | | |

1 Cooperating Member

- Israel

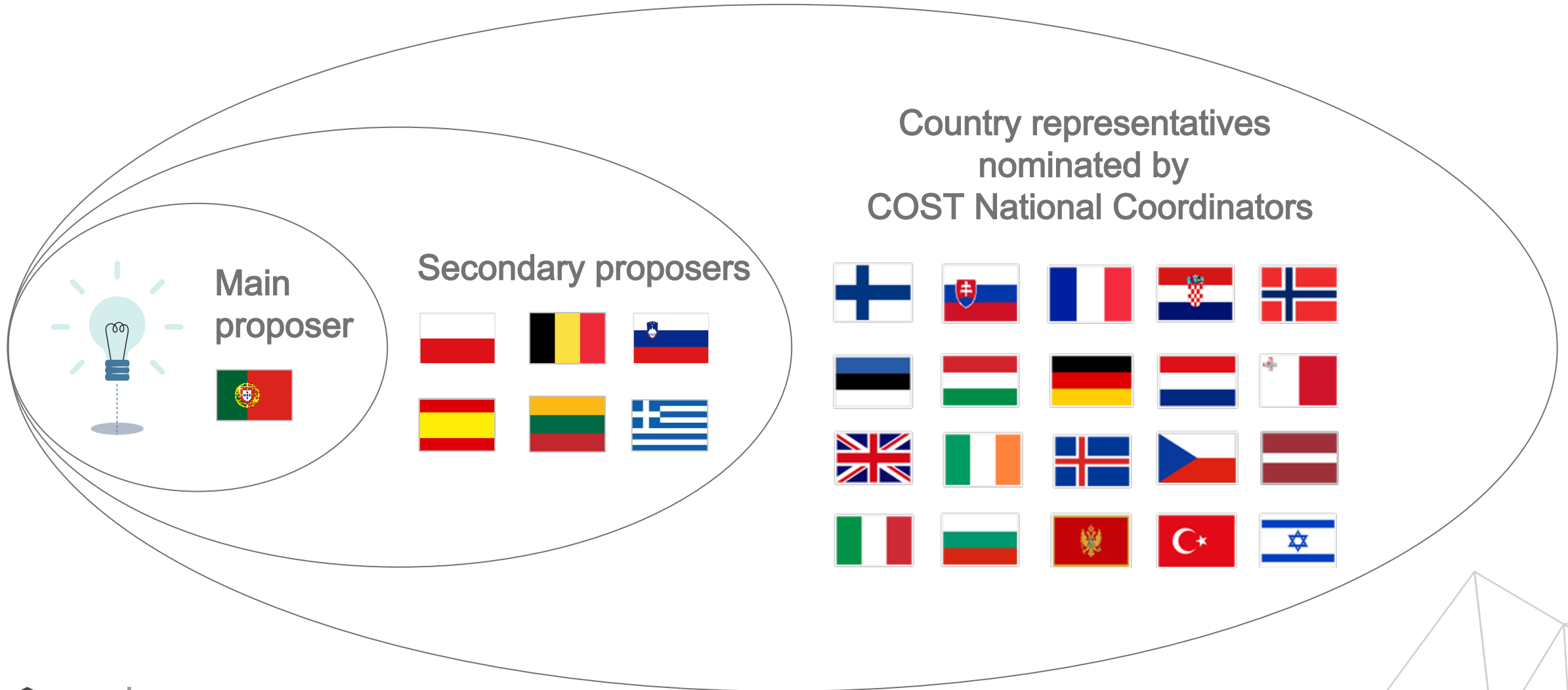
1 Partner Member

- South Africa



COST Actions: how do they work?

How it works?

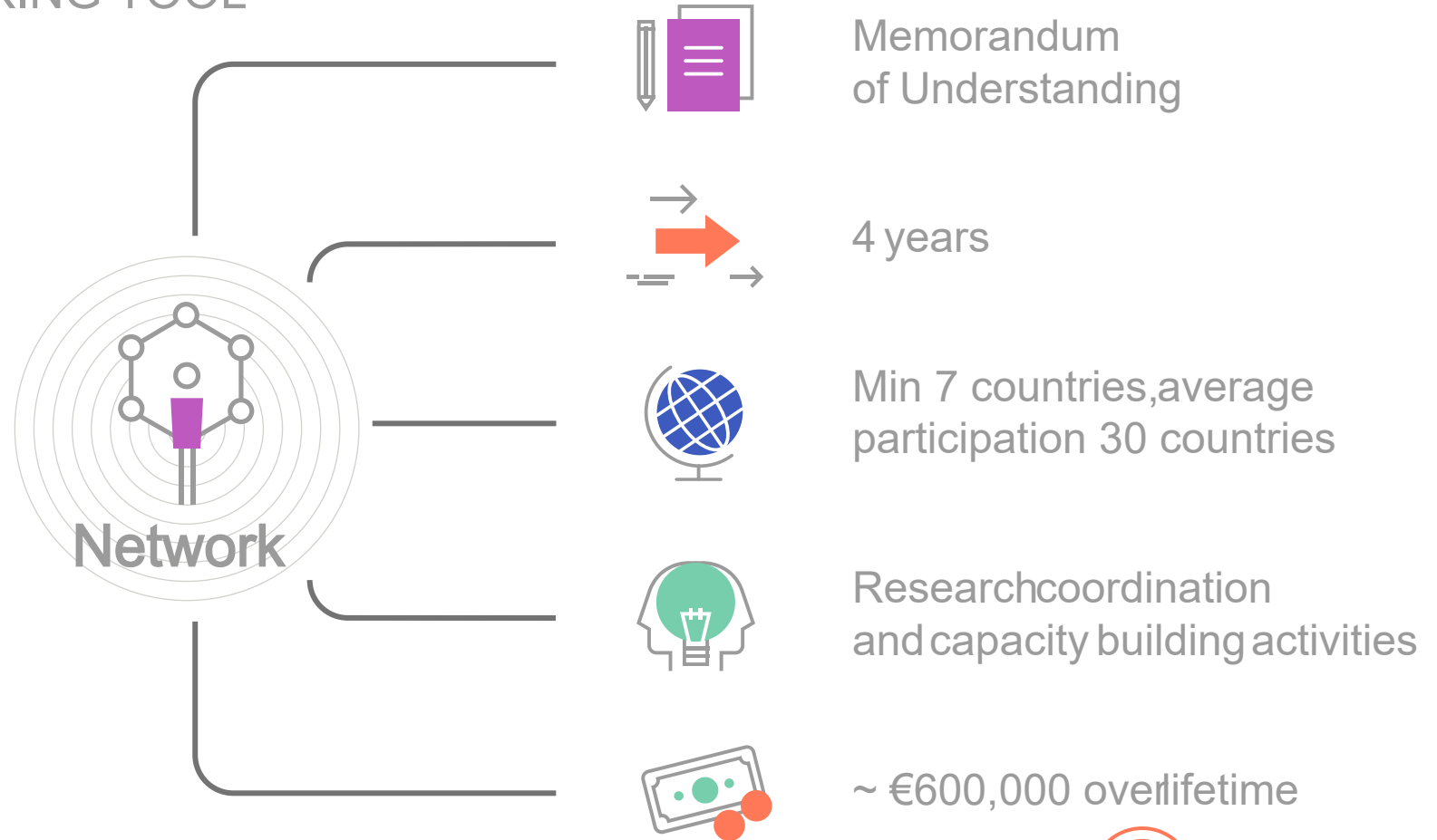


COST Actions

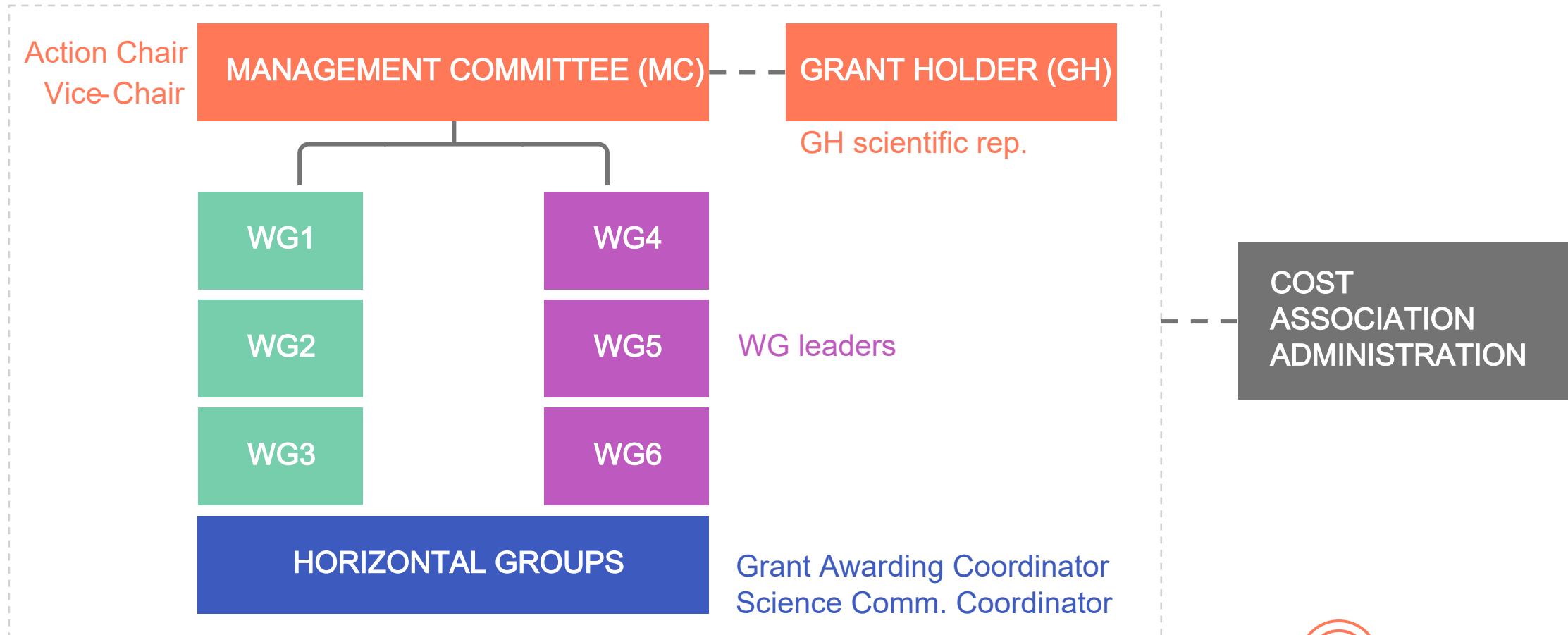
AN EFFICIENT NETWORKING TOOL

COST provides funding
for research coordination
and capacity building
activities

COST is not funding
research itself,
but pooling resources
and research results
by networking

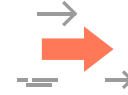


COST Action structure and leadership positions



Networking tools

Research coordination
& capacity building
activities



Management committee meetings



Working group meetings



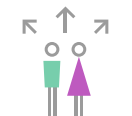
Conferences/ workshops



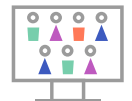
Training schools



Short-term scientific missions

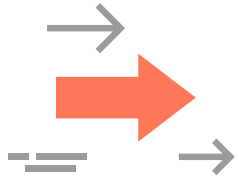


Dissemination



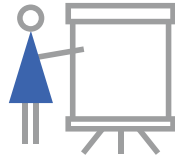
Virtual networking grants

Key figures



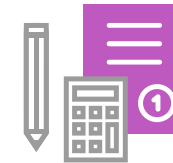
292

Running Actions



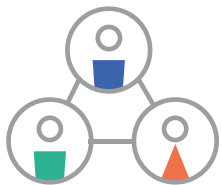
203

Trainingschools



€150,000

Average annual budget
of a COST Action



2,320

Short-term
scientific missions



45,000

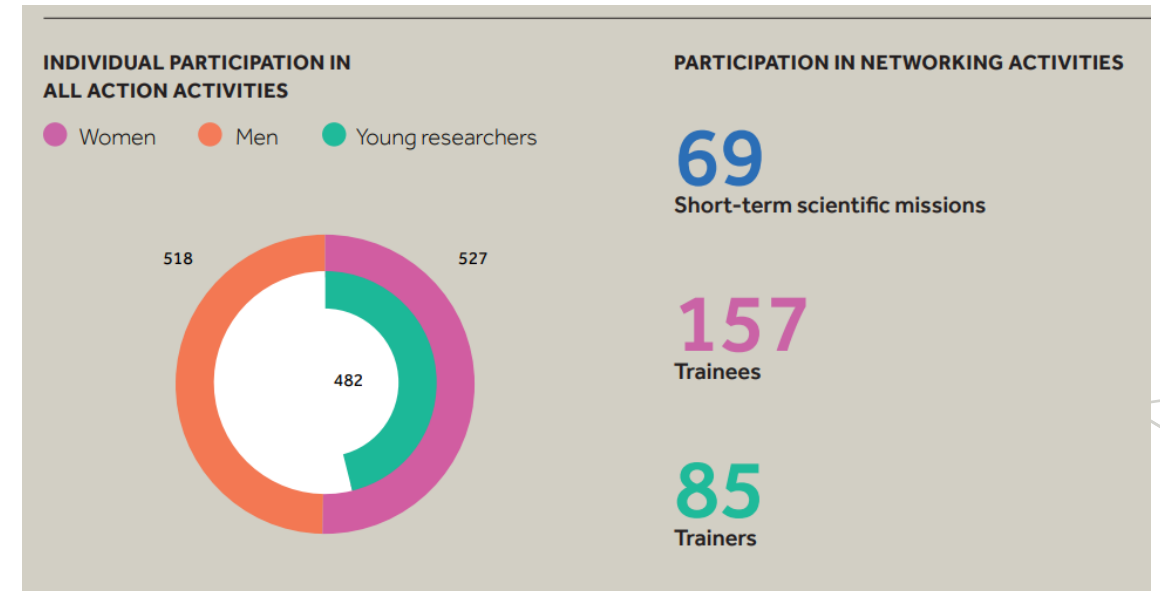
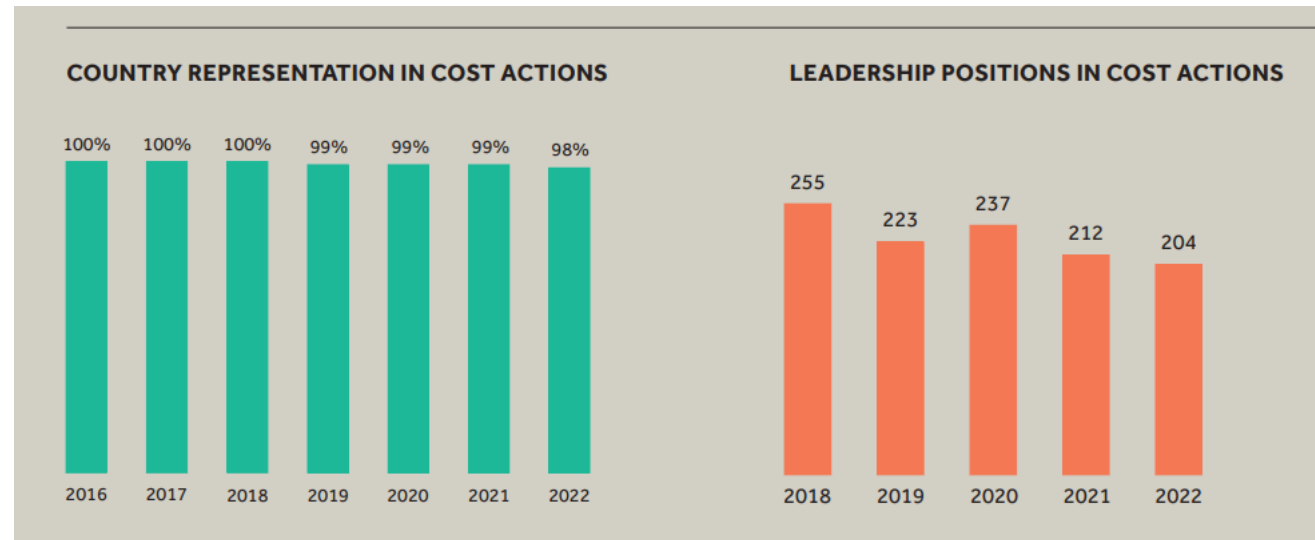
Researchers involved
in COST Actions



€153 million

COST budget
(in Horizon Europe for a 3-year period)

UK participation in COST: key figures 2022

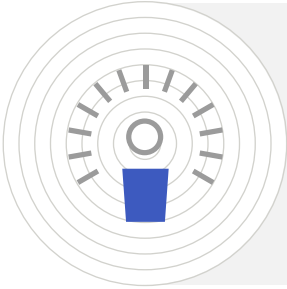


Impact



Scientific and societal impact

- Scientific discoveries and breakthroughs, development of new research infrastructures, adoption of common standards, technological applications in the form of products and services, etc.



Research careers

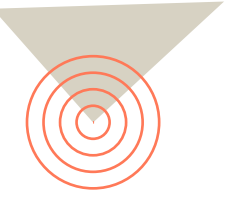
- 95% of researchers participating in COST Actions indicate that participation has led to career advancement



Follow-up funding

- Horizon 2020 reported success rate: 39% (on a yearly basis, around €390 million of approved common research projects spin off from ending Actions)

Travel Reimbursement rules



Daily allowance (DA) covers:

- Hotel
- Meals
- Local travel in meeting country

Based on:

- Meeting country
- Travel times



Long distance travel (≥ 101 km) covers total travel expenses up to 1500 EUR

- Meeting country €160-200
- Travel times
- Meals offered by Local Organiser (- 10% deducted per provided meal)

Others:

- Visa costs
- Travel cancellation insurance

What is the maximum grant amount for each type?

- **STSM**

- ✓ Up to **4000 EUR**

- request to prepay 50% is possible but decision lies with GH Institution

- **Virtual Mobility Grant**

- ✓ Up to **1500 EUR**

- **ITC Conference Grants and Dissemination Conference Grants**

- ✓ Up to **2000 EUR** per grant for face to face conferences

OR

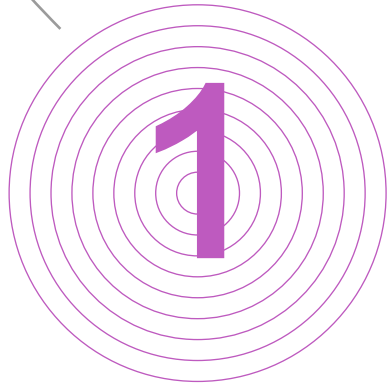
- ✓ Up to **500 EUR** for virtual conferences

How to engage with COST?





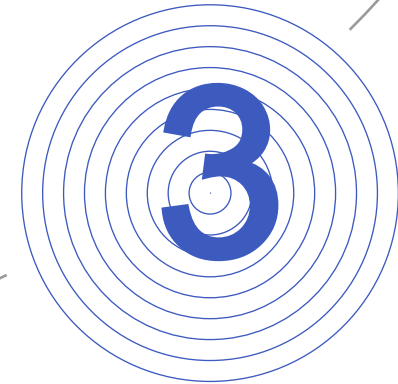
How to engage with COST?



As a **participant**
of a running Action



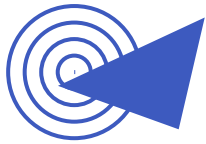
As a **proposer**
of a new COST Action



As **expert** to evaluate
submitted proposals

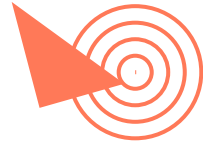
NEXT COLLECTION
DATE: 25 OCTOBER 2023

1. As a participant in a running Action (1/2)



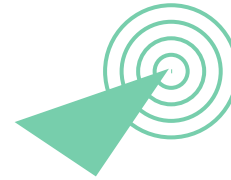
FIND THE ACTION IN YOUR FIELD

of interest on the
COST website



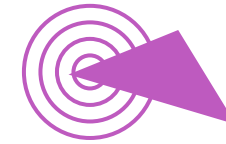
READ THE PROJECT PLAN

(MoU)—identify
your potential
contribution



BROWSE THE ACTION'S OWN WEBSITE

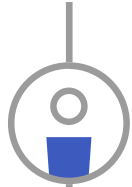
—check their
activities



IDENTIFY THE OPPORTUNITIES

to join the Action
and your contact
person

1. As a participant in a running Action (2/2)



AS A MANAGEMENT COMMITTEE (MC) MEMBER

(contact the COST National Coordinator)



AS A WORKING GROUP (WG) PARTICIPANT

(contact the WG leader)



AS AD-HOC PARTICIPANT IN ACTION ACTIVITIES

short-term scientific mission, ITC conference grant, training school, workshop/conference,...

(check the Action's website, contact the chair or the national MC member)



JOIN 70 NEW COST ACTIONS FROM 9 JUNE 2023



19% of
main
proposers
are young
researchers



47% of
main
proposers
are
women



66% of the
proposals
feature
participants
from
industry/SMEs



26% of main
proposers
come from
an
Inclusiveness
Target
Country
(ITC)



77% of the
future
networks
have
attracted
participants
from all
over the
world

Find out more about how to join a new COST Action here:
[70 new COST Actions now online: apply to join](#)

2. As proposer of a new COST Action

COST OPEN CALL



One-stage **online submission** of proposals (eCOST)

Proposal should focus on S&T Excellence, Networking Excellence, Impact and Implementation

70 COST Actions approved per collection

Main proposer + **secondary** proposer

Collection date:
25 October 2023
12:00 CET

www.COST.eu
opencall@cost.eu

Open Call for proposals—how to apply

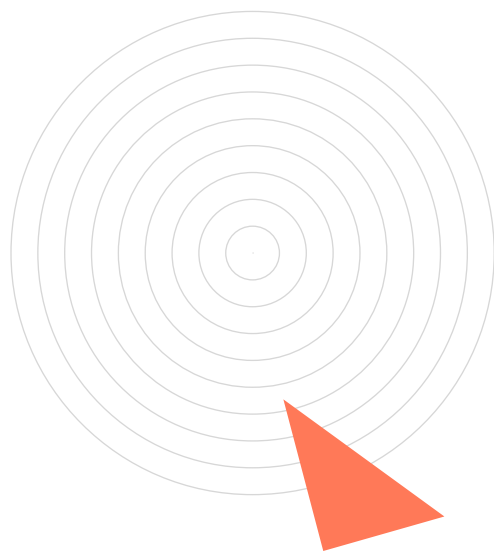
E-COST



1

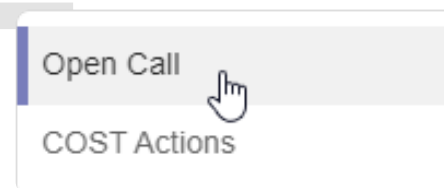
Create a COST account:

<https://www.cost.eu/ecost>

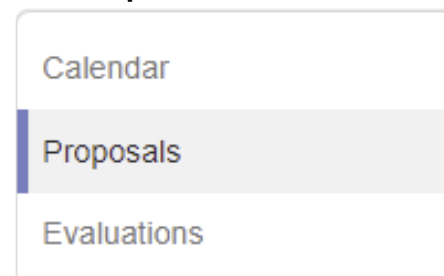


2

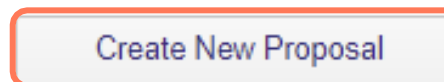
> Open Call



> Proposals



> Create new proposal



3

Online registration
and submission:

General information
+ Technical Annex

Proposals

GENERAL
FEATURES

TECHNICAL
ANNEX

(www.cost.eu)

1. S&T Excellence
2. Networking Excellence
3. Impact
4. Implementation

COST EXCELLENCE AND
INCLUSIVENESS POLICY
SPECIFIC OBJECTIVES

NETWORK OF
PROPOSERS

COST Excellence and Inclusiveness Policy

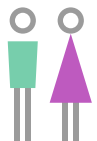
PROMOTING



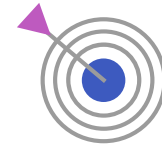
**GEOGRAPHICAL
BALANCE**(ITC)



AGE BALANCE
(young researchers)



GENDER BALANCE
throughout its activities



OBJECTIVES

1. Identifying excellence
in science and technology
across Europe

2. Increasing research
communities' access
to funding and infrastructures

3. Triggering structural changes
in COST Members' national
research systems

Evaluation

SESA



ELIGIBILITY!

- Anonymous
- Minimum 50% ITC
- Peaceful purpose
- Format
- English

STEP ①

EXTERNAL REMOTE EVALUATION

- 3 Independent External Experts
- Technical Annex

STEP ②

REVISION AND QUALITY CHECK BY REVIEW PANELS

STEP ③

SELECTION BY THE SCIENTIFIC COMMITTEE

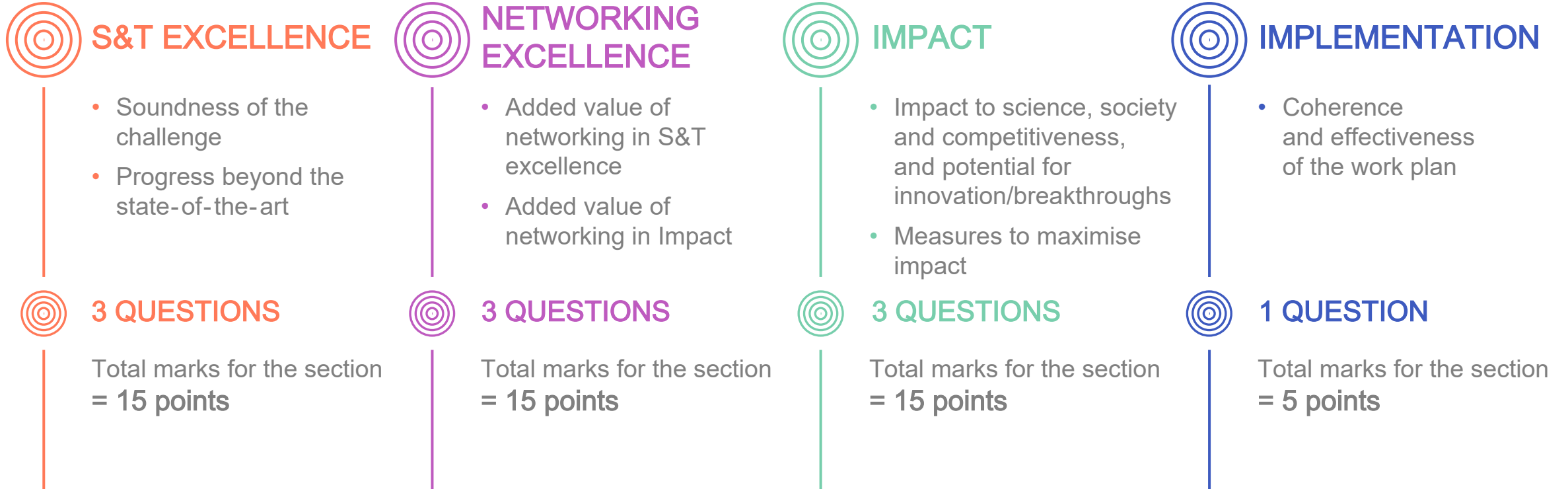
COST policy and objectives

STEP ④

APPROVAL BY COST COMMITTEE OF SENIOR OFFICIALS

Results 78 months after submission

Evaluation criteria



TOTAL MARKS AWARDED = 50 points
OVERALL THRESHOLD = 34 points

How to apply in a nutshell




Read the official
announcement

Online registration
and submission(e-COST)

Helpdesk:
opencall@cost.eu

Read the SESA
Guidelines

Technical Annex template
(Documents and Guidelines
repository on the COST website)



70 new COST Actions:
[News article on 70
approved COST
Actions – May 2023](#)

Tips for submitting a winning COST Action proposal



[Tips for submitting a winning COST Action proposal](#) YouTube



3. As external expert

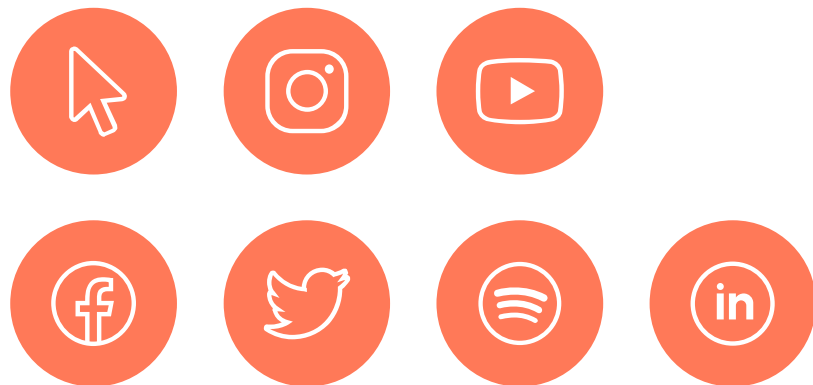
**As a COST Expert,
you will have the opportunity to**

Contribute to the
evaluation of COST
Open Call proposals



Participate in the
assessment of Action
results and outcomes

THANK YOU!





ACRYRED



COST Action CA21149: ACRYRED

Reducing acrylamide exposure of consumers by a cereals supply-chain approach targeting asparagine Presentation Title

Nigel G. Halford, Rothamsted Research

Action Chair

ACRYRED • COST Action CA21149 • Reducing Acrylamide exposure of consumers by a Cereals supply-chain approach targeting Asparagine

This article/publication is based upon work from COST Action ACRYRED, CA21149, supported by COST. COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

The challenge



The problem of acrylamide in common food products has implications for the whole food supply chain, from plant breeders through farmers, food processors and retailers to consumers and regulators.

We have to stay ahead of the game, by making sure that cereal products can comply with current and future regulations on acrylamide.

This requires a farm-to-fork understanding of acrylamide mitigation in foods produced from grains.

Who is involved?

- Plant breeders
- Agricultural grain farming community
- Global grain traders
- EU food processors
- Toxicologists
- Academic researchers from relevant disciplines
- Public regulators
- Relevant consumer groups
- Health interest groups



Key objectives



- Co-ordinate research.
- Facilitate knowledge exchange between scientific disciplines.
- Stimulate research in supply chain management.
- Stimulate research efforts in cereal farming practices.
- Build capacity.
- Create interdisciplinary training.
- Develop academic/industrial collaboration programmes to reduce barriers between knowledge and implementation.
- Support researchers from Target Countries to extend knowledge network.

What we hope to achieve



Scientific progress

- Cross-disciplinary exchange of knowledge that will inspire new research efforts in scientific fields that have not been involved in the challenge to reduce acrylamide levels in food so far.
- Holistic understanding of the cereal supply chain that will support improvement of quality and food safety management.
- An overview of the relative risks and consequences of changes in crop composition and processing for the Maillard Reaction, product quality and food safety for cereal-derived products.
- A better understanding of the underlying genetics controlling asparagine metabolism in cereals that can underpin the development of genetic tools for breeders.
- Development and dissemination of 'best practice' for crop management to produce cereal grains with consistently low acrylamide-forming potential, including crop nutrition and protection.
- Discussions on rapid testing parameters and criteria that will help to define standards for the development of accurate rapid testing tools for asparagine levels.

What we hope to achieve



Economic progress

- Discussions involving the full supply chain on the economic impact that measures to lower acrylamide levels will have on the value chain and on consumer prices, and how costs and benefits may be distributed along the value-chain.
- Increased availability of raw materials at lower and more consistent free asparagine levels.
- Discussion on technical and economic requirements that will inform the development and commercialisation of rapid measurement tools for asparagine levels.
- Enabling of grain buyers to select what they buy based on free asparagine levels using a rapid asparagine testing tool.

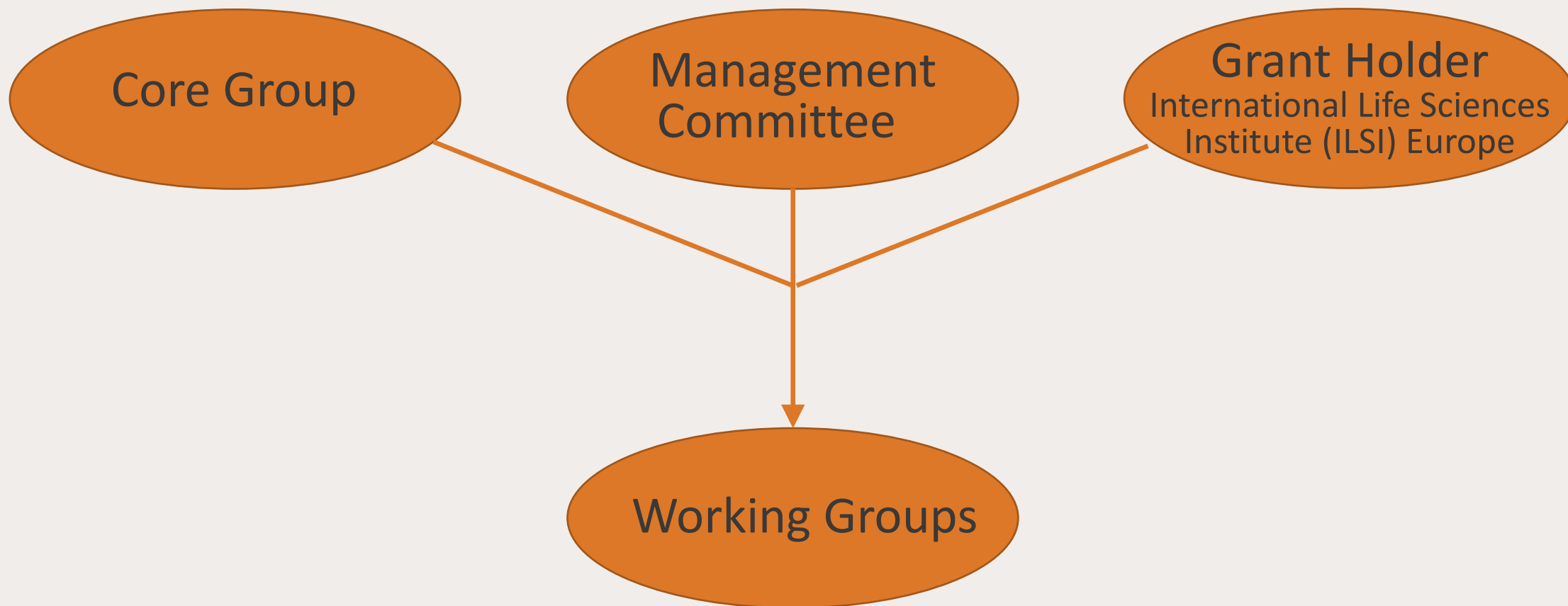
What we hope to achieve



Societal progress

- Facilitate and accelerate the reduction in acrylamide levels in cereal products.
- Promote dialogue on and encourage the inclusion of information on free asparagine levels in crop variety descriptions.
- Promote the development and validation of analytical tools to measure free asparagine and acrylamide.
- Provide a source of information for policy-makers about what the scientific community and the industrial supply chain are developing to reduce the risk of acrylamide formation in products.
- Contribute to the continuous improvement of the FoodDrinkEurope Toolbox.

Structure of the COST Action



The structure of the COST Action



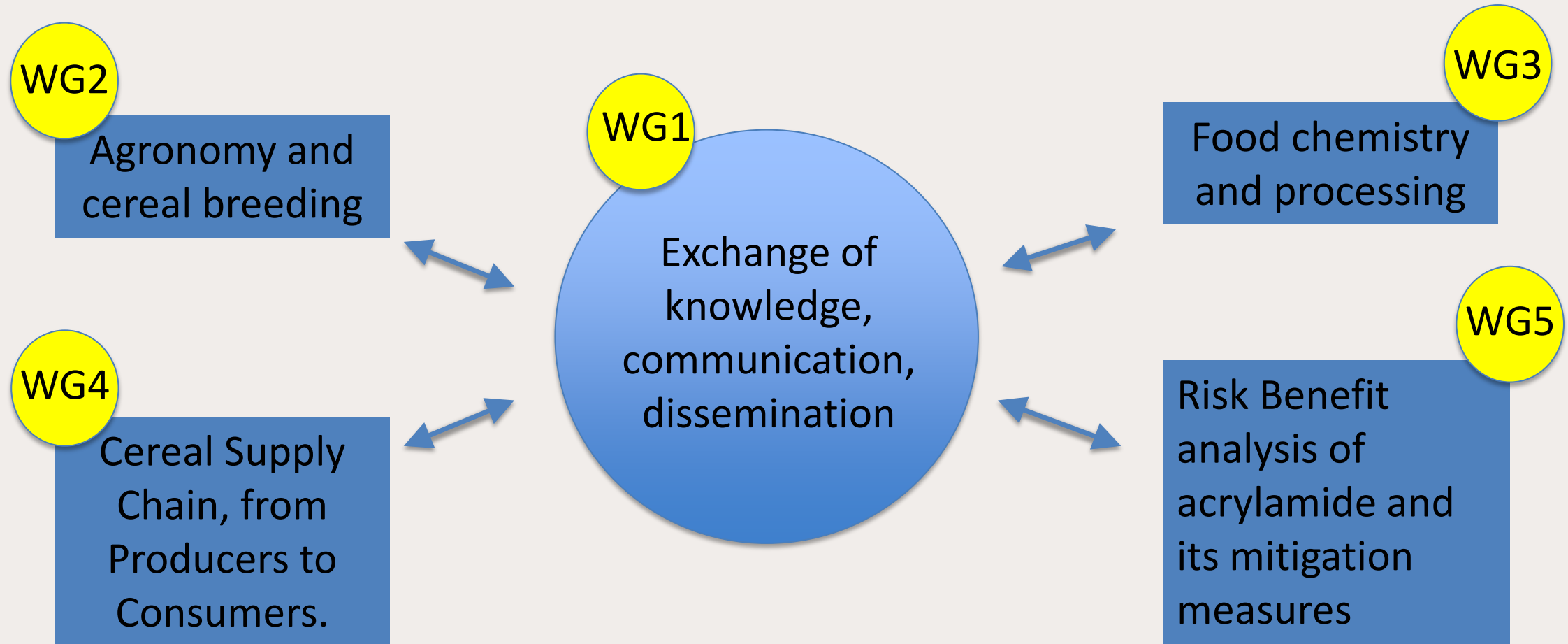
Core Group

- Action Chair: Nigel Halford
- Vice Chair: Neil Buck
- Grant Holder Scientific Rep.: Andrea Colafranceschi
- Grant Awarding Coordinator: Kristína Kukurová
- Science Communication Coordinator: Małgorzata Starowicz
- Working Group leaders and co-leaders.

The structure of the COST Action



Five working groups:



Working Group 1



Exchange of
knowledge,
communication,
dissemination

Leader: Nigel Halford (UK)

Co-leader: Małgorzata Starowicz (PL)

Working Group 2



Agronomy and
cereal breeding

Leader: Marianne Rakszegi (HU)

Co-leader: Viktor Korzun (DE)

Working Group 3



Food chemistry
and processing

Leader: Jane Parker (UK)

Co-leader: Christine Nowakowski (US)

Working Group 4



Cereal Supply
Chain, from
Producers to
Consumers

Leader: Tanya Curtis (UK)

Co-leader: TBC

Working Group 5



Risk Benefit
analysis of
acrylamide and
its mitigation
measures

Leader: Zuzana Ciesarová (SK)

Co-leader: Vural Gökmen (TR)

Working together



- There must be interactions between as well as within working groups.
- Dialogue between researchers, breeders and food businesses is crucial: what food businesses need, what plant breeders can realistically deliver, how research scientists can support, how it impacts on the cereal supply chain.
- Free asparagine accumulation in grains is affected by many factors, meaning that many researchers may not realise the significance of their work for the acrylamide issue: we need to bring those people into the COST Action.

Other benefits of the COST Action



- Being chair of a COST Action opens some doors and gets people's attention.
- The COST Action raises awareness of the issue amongst scientists. Grants for scientists to visit other labs may bring people into this research area, particularly ECRs.
- The COST Action participants have a lot of expertise on the acrylamide issue: we aim to become a recognised, reliable and trusted source of information.
- We can bring people together from very different sectors, from plant breeders and farmers, through to food businesses and consumer groups.

The ACRYRED website



https://acryred.eu/?cmp_bypass=btk

The screenshot displays the ACRYRED website interface. At the top, the ACRYRED logo and navigation menu (About, Structure, News, Activities, Contacts) are visible. The main content area features a large image of a hand pouring grains, with the project title "Reducing Acrylamide Exposure of Consumers by a Cereals Supply-chain Approach Targeting Asparagine" and a brief description. Below this, there's a section for "Description of the Action" with tabs for Overview, Objectives, and Background. The "Meet our Working Groups" section lists five groups: W02 Agronomy and Plant Breeding, W01 Interdisciplinary Exchange and Integration of Knowledge on Asparagine and Acrylamide, W03 Chemistry & Processing, W04 Cereal Supply Chain Economy, and W05 Risk-benefit of MR Products and its Mitigation. Each group has a "KNOW MORE" link.

ACRYRED • COST Action CA21149

Reducing Acrylamide Exposure of Consumers by a Cereals Supply-chain Approach Targeting Asparagine

Establish a multi-disciplinary research and communication network on reducing Acrylamide formation

[KNOW MORE](#)

Description of the Action

[Overview](#) [Objectives](#) [Background](#)

Acrylamide in food is considered a potential health hazard. It may lead to increased risk of cancer. Acrylamide forms during industrial food processing and home cooking. For years, the cereals processing industry has been engaged in reducing acrylamide formation through production process optimisations and establishment of guidelines.

[KNOW MORE](#)

Meet our Working Groups

[KNOW MORE](#)

- W02** Agronomy and Plant Breeding [KNOW MORE](#)
- W01** Interdisciplinary Exchange and Integration of Knowledge on Asparagine and Acrylamide [KNOW MORE](#)
- W03** Chemistry & Processing [KNOW MORE](#)
- W04** Cereal Supply Chain Economy [KNOW MORE](#)
- W05** Risk-benefit of MR Products and its Mitigation [KNOW MORE](#)

Thankyou!

