



COST (European Cooperation in Science & Technology)

Kick-off Meeting – Action IC1207

PARSEME: PARSing and Multi-word Expressions.
Towards linguistic precision and computational efficiency in natural language processing.

Dr. Ralph Stübner
ICT Science Officer

08.03.2013



Action Status

- **Memorandum of Understanding:** COST Document IC1207
- **CSO Approval:** 21/11/2012 (*After 20/11/2013, MC approval is required for new Parties to join the Action*)
- **End of Action:** 07/03/2017
- **DC Rapporteur:** Roel van den Berg
- **Chair/Vice-Chair:** to be determined
- **Website:**
http://www.cost.eu/domains_actions/ict/Actions/IC1207
- **Parties**
 - Acceptances : 20
 - Intentions to accept: 0



About COST



COST: European Cooperation in Science and Technology

**An inter-governmental framework,
founded in 1971, allowing the
coordination of nationally-funded
research on a European level
through the support of cooperation
and mobility of researchers.**



What is COST?

COST is the oldest and widest European intergovernmental framework for transnational Cooperation in Science and Technology.

For 40 years COST has supported networking of research activities across all its Member countries (36 today) and beyond.

COST is open to all disciplines, to all novel and ground-breaking S&T ideas, to all categories of partners, to the world where mutual benefit is real.

What is COST Mission? (23 May 2011)

COST enables breakthrough scientific developments leading to new concepts and products.

It thereby contributes to strengthen Europe's research and innovation capacities.



What are COST Principles?

- Highest S&T Quality
- S&T-driven (bottom-up)
- Transdisciplinarity
- Young researchers
- Sharing knowledge
- Inclusive
- Leverage



What are COST features?



- Intergovernmental
- Pan-European
- Open to global cooperation on the base of mutual interest
- Light-weight administration
- Easy implementation

COST Strenghts



networking of researchers (its Actions), which are open to:

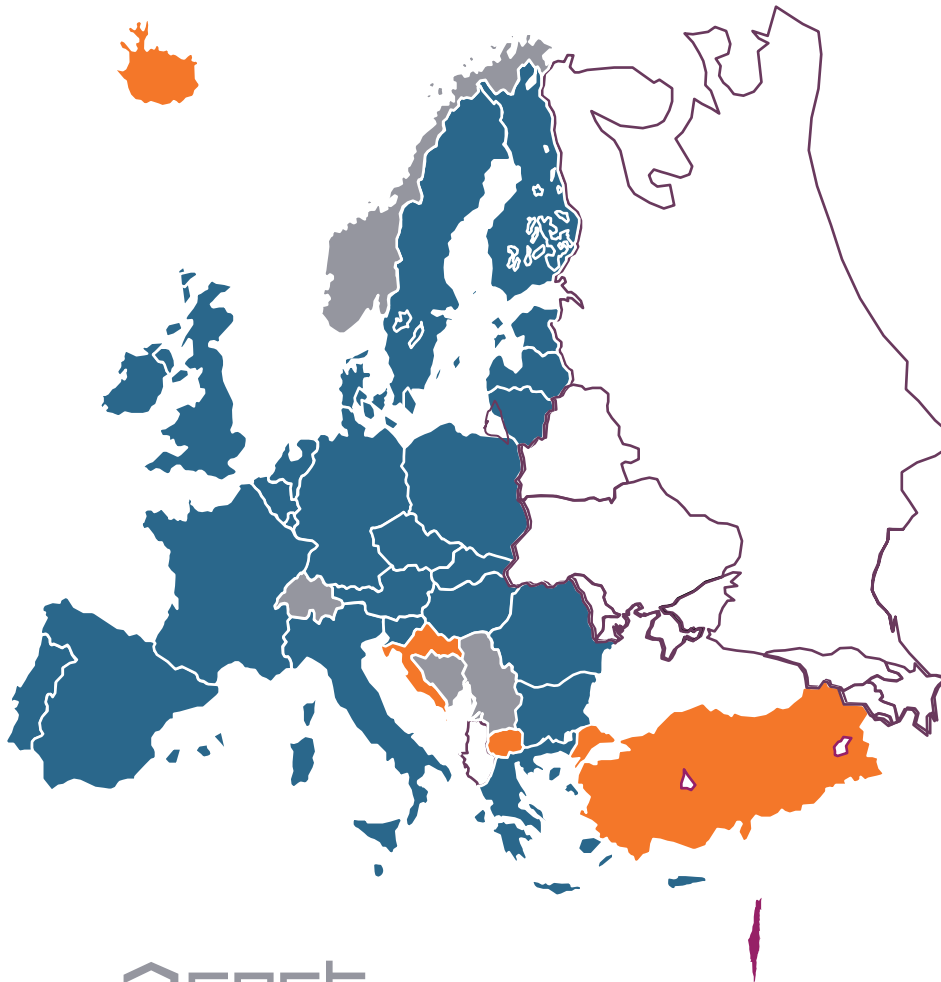
- all fields of S&T (including interdisciplinary, new and emergent fields)
- any novel and original idea (innovative)
- all partners (public and private, big and small)
- all career stages (young and senior investigators)
- all countries (small and big, leader and follower countries), and to non-COST countries (fostering international cooperation)

COST in Figures

- Established in 1971
- 19 founding COST countries → now 35 + 1 Cooperating State
- 4 reciprocal agreements with Non-COST countries
- 250 MEUR of FP7



COST Countries



■ The 27 EU Member States

■ EU Acceding & Candidate Countries

- ▶ Croatia
- ▶ Former Yugoslav Republic of Macedonia
- ▶ Iceland
- ▶ Turkey

Other Countries

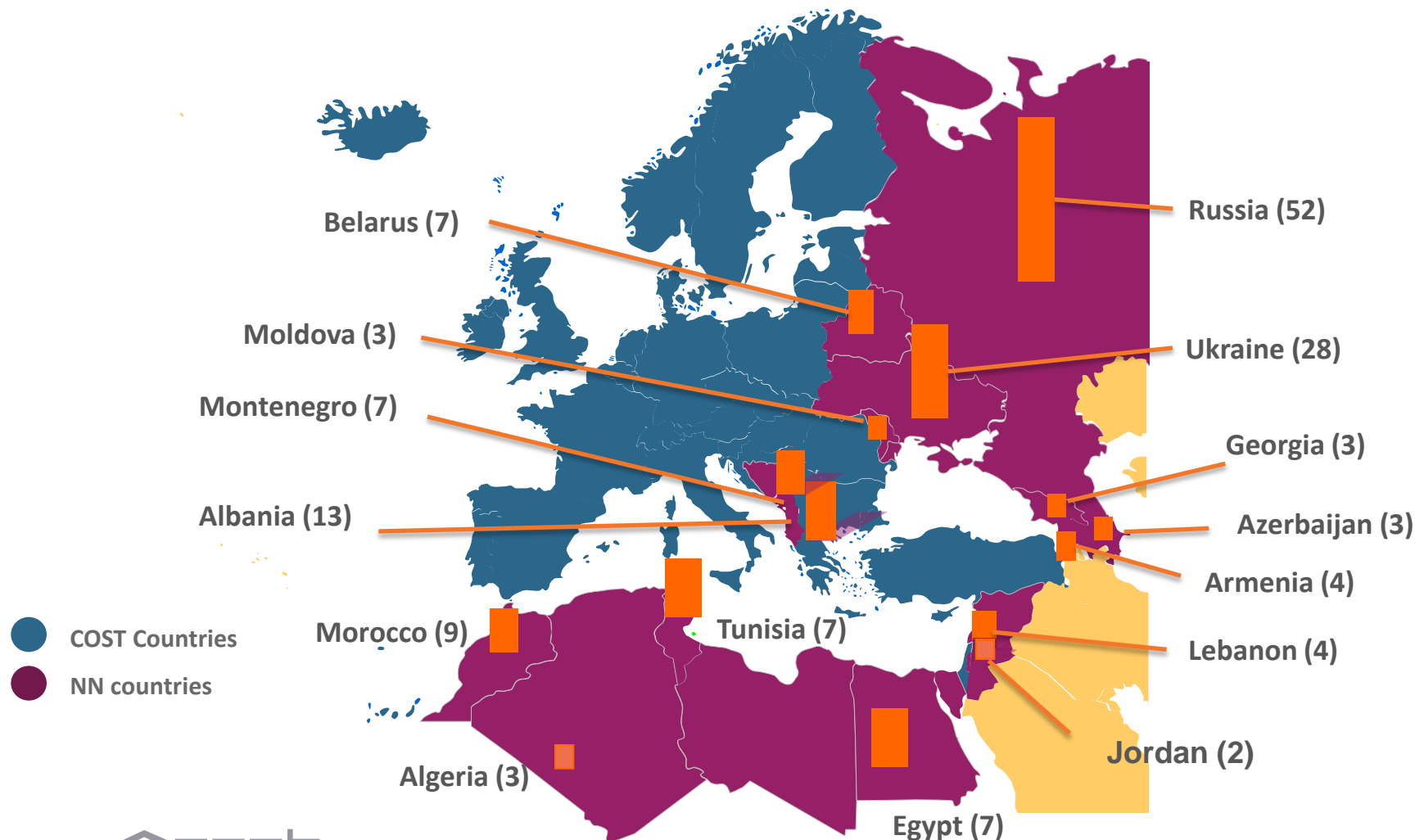
- ▶ Bosnia and Herzegovina
- ▶ Republic of Serbia
- ▶ Norway
- ▶ Switzerland

COST Cooperating States

- ▶ Israel

Near Neighbour countries participation

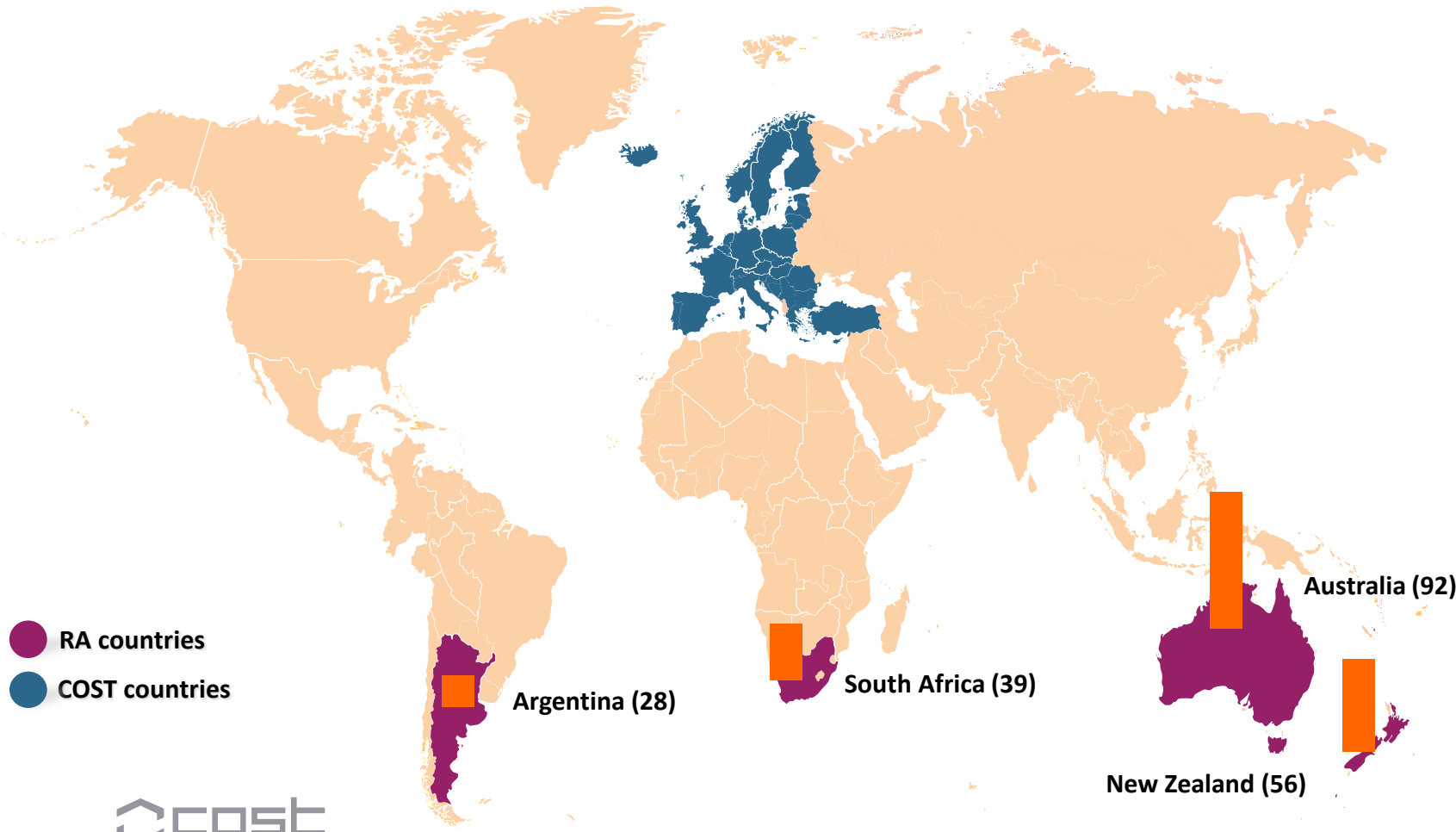
152 Participations in running Actions (15 countries) – September 2012





Reciprocal Agreements (RA) Participation in Actions

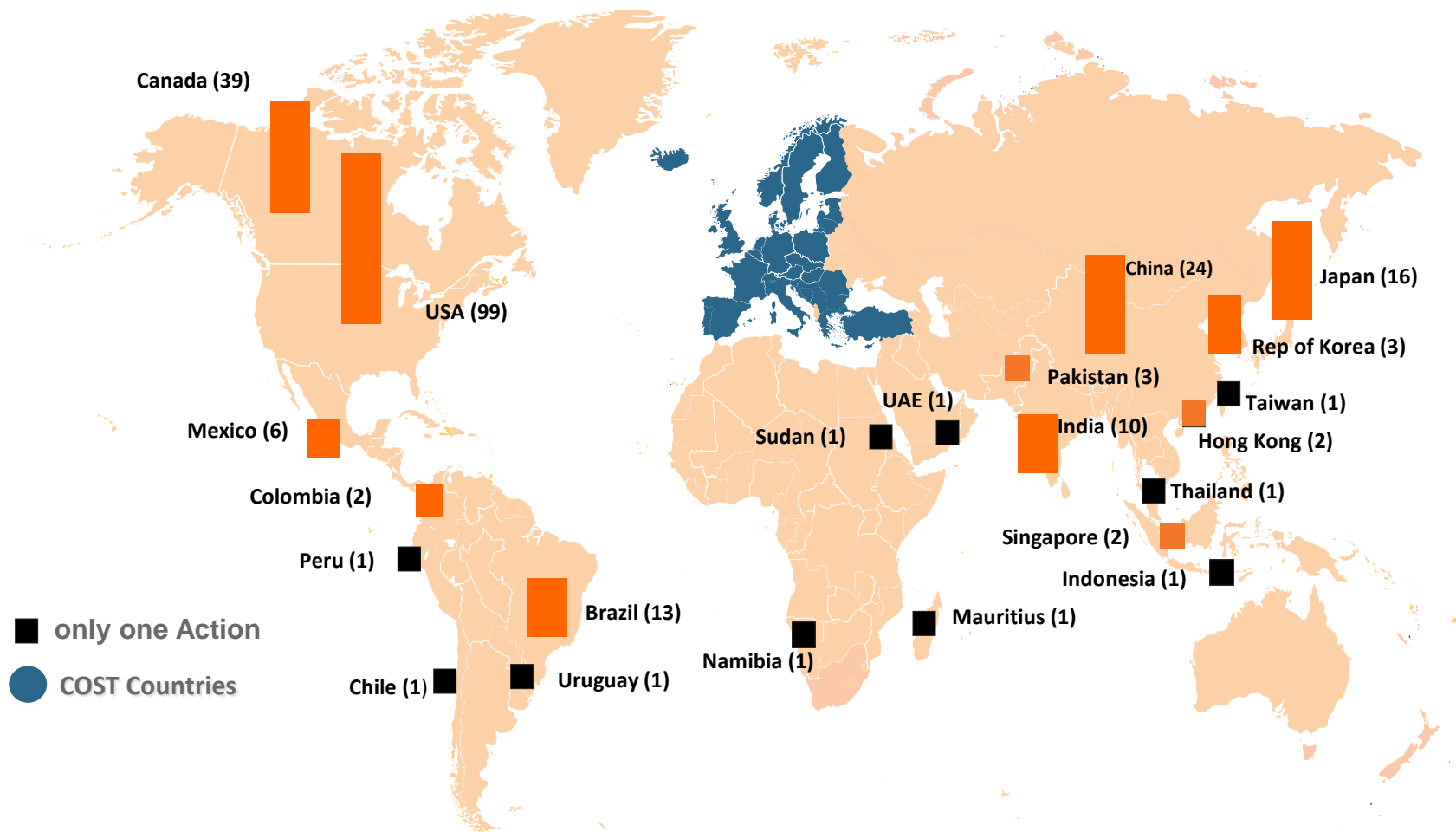
215 Participations in running Actions (4 countries) - September 2012



- RA countries
- COST countries

Non-COST Countries

Participation in COST Actions excluding Reciprocal Agreements and Near Neighbour Countries



229 Participations in running Actions (22 countries) - September 2012

COST Funding



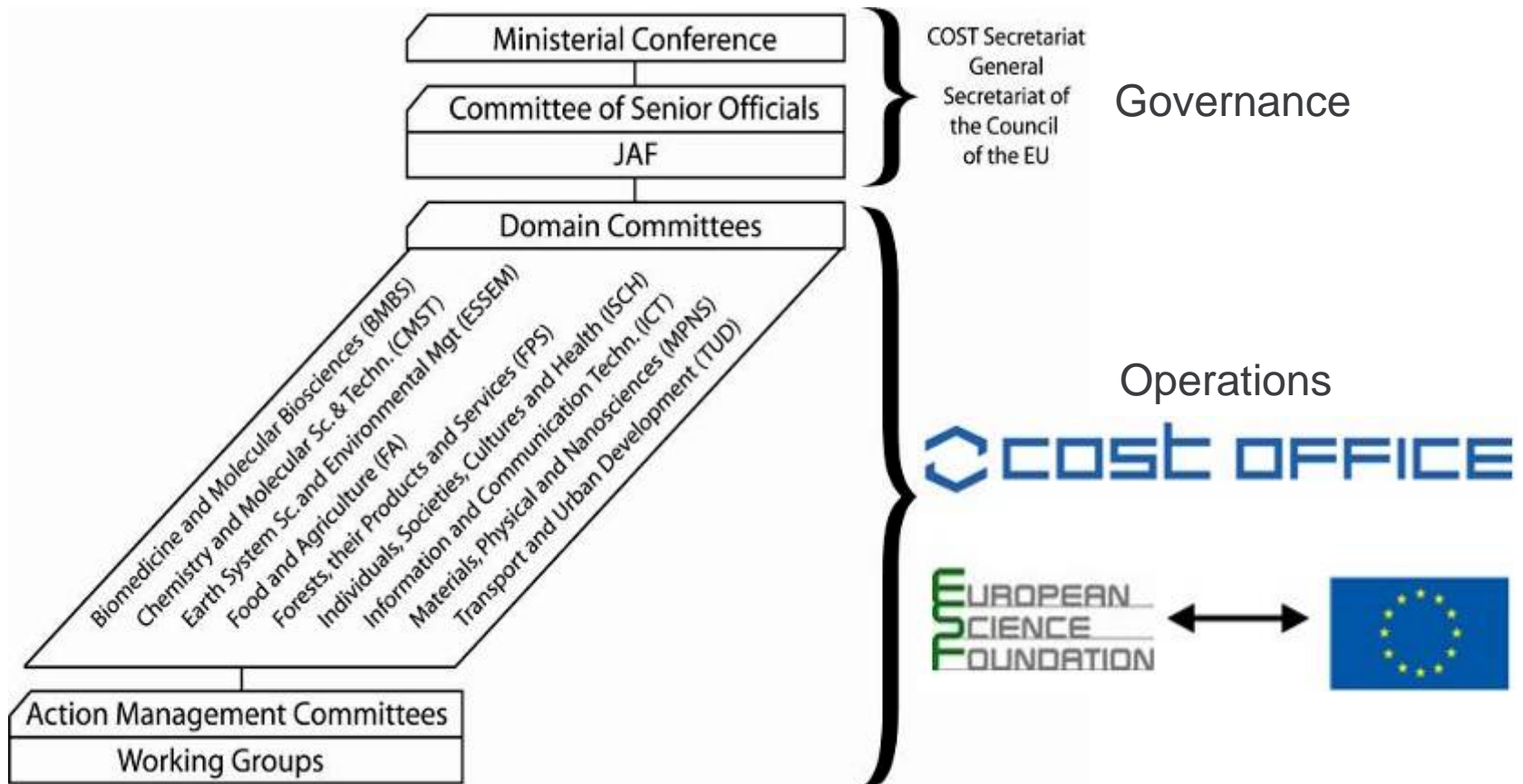
- Funded through the FP7 'Cooperation' programme
- The European Science Foundation (ESF) is COST's implementing agent
- Operated by the COST Office (Brussels)



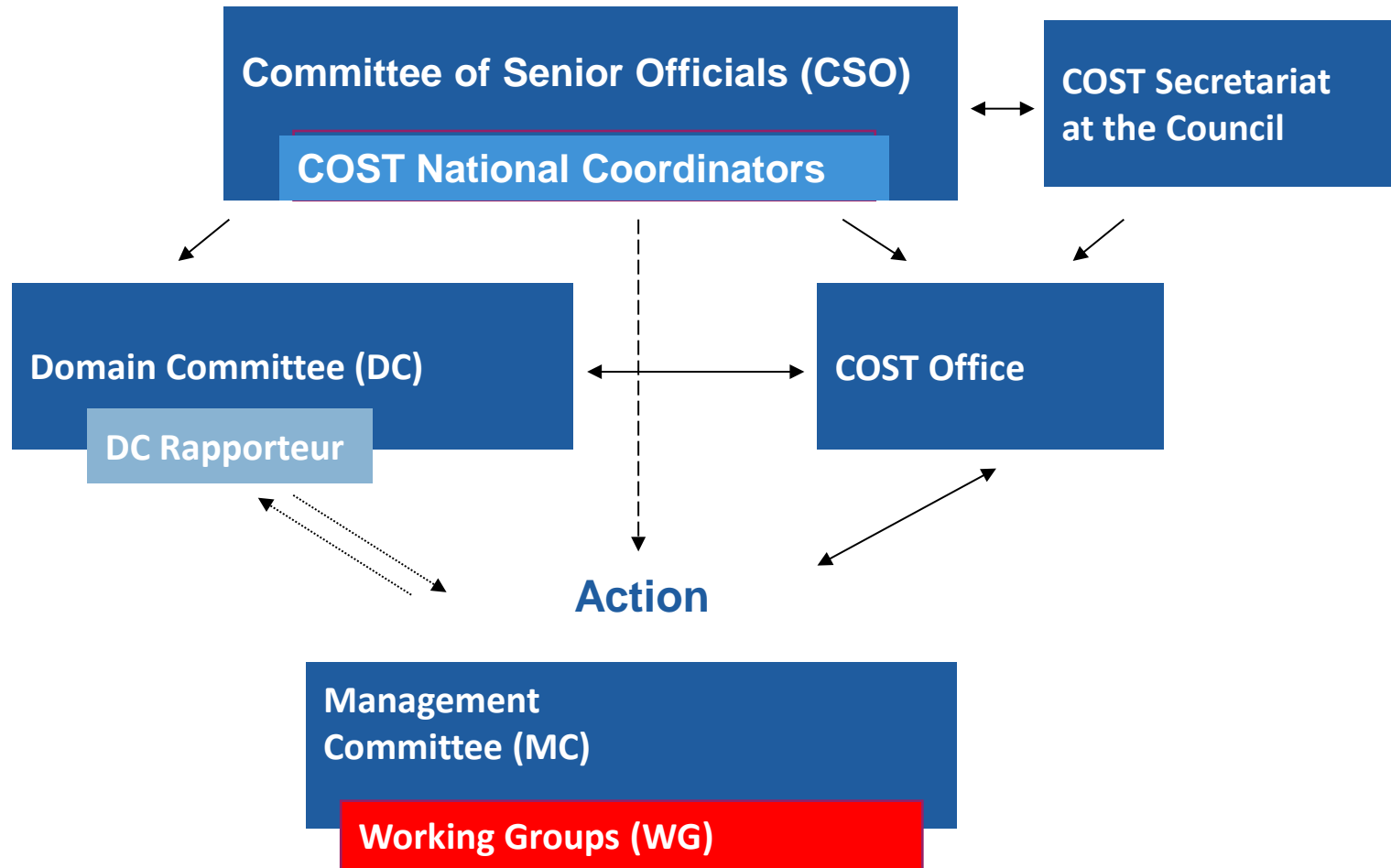
What is a COST Action?

- **COST Actions are networks** integrating externally funded research, with a minimum of 5 participating COST countries. They receive a financial contribution based on a 4-year joint work programme for:
 - Scientific/Working Group meetings
 - Workshops and Seminars
 - Short Term Scientific Missions (STSMs)
 - Training Schools
 - Dissemination

COST Organisation



COST Governance





COST Committee of Senior Officials (CSO)

- **Responsible for the overall strategy of COST**
- **Includes COST National Coordinators**
- **Approves all COST Actions, and (rarely) their prolongation**
- **Approves participation from institutions in non-COST countries**
- **President:** Dr Ángeles Rodríguez-Peña



Domain Committee (DC)

- **Evaluates proposals for new COST Actions**
- **Monitors running COST Actions** through Rapporteurs
- **Assesses completed COST Actions** through Final Evaluation Panels
- **Proposes strategic initiatives** in its Domain
- Disseminates and highlights COST activities
- **Promotes synergies** between and among all COST Domains, ESF and the European Commission (EC)
- **Chair of the ICT DC:** Prof. Soulla Louca (Univ. of Nicosia)



COST Scientific Domains

BMBS	Biomedicine and Molecular Biosciences
CMST	Chemistry and Molecular Sciences and Technologies
ESSEM	Earth System Science & Environmental Management
FA	Food and Agriculture
FPS	Forests, their Products and Services
<i>ICT</i>	<i>Information & Communication Technologies</i>
ISCH	Individuals, Societies, Cultures & Health
MPNS	Materials, Physical & Nanosciences
TUD	Transport & Urban Development



Management Committee (MC)

- **Responsibility**
 - Supervises and coordinates the implementation of the Action
 - MC minuted decisions are the **only legal basis for expenditures**, and must respect COST rules
- MC meetings are supported by a template agenda (via Grant Holder and e-COST)
- **Composition**
 - A maximum of two representatives from each Party
 - Each party has one vote
 - One (1) non-voting representative from each participating non-COST institution, with a maximum of two (2) representatives per non-COST country



Working Groups (WGs)

- **Responsibility**
 - Coordinates pre-funded research
 - Discusses research progress and identifies or makes progress on efforts needed in order to achieve the objectives of the Action
- **Working Group members may be:**
 - MC members
 - Other scientists from the accepting parties
 - Up to 4 invited speakers from non-participating countries or experts may be invited to meetings
- Reimbursement of travel expenses of individual participants is decided by the MC, subject to budget availability



Joining an Action

- **COST countries:**
 - Membership in a new Action is **open to all COST countries within 12 months of Action approval**
 - After that, MC approval is *required*
- **Non-COST countries:**
 - Applicants should directly **contact Chair of the Action**
 - If mutual benefit exists, then **several approval steps** (Action, Domain and COST CSO) taking about 6 months



Monitoring/Evaluation of Actions

- **Monitoring of Actions is carried out via:**
 - Annual Monitoring Progress Reports
 - Attendance of Action meetings by the DC Rapporteur assigned to each Action
 - Annual Progress Conference
- **Annual Progress Conference (APC):**
 - MC Chairs presents Action progress
 - All MC Chairs are invited
 - 12-13 June 2013, Malta

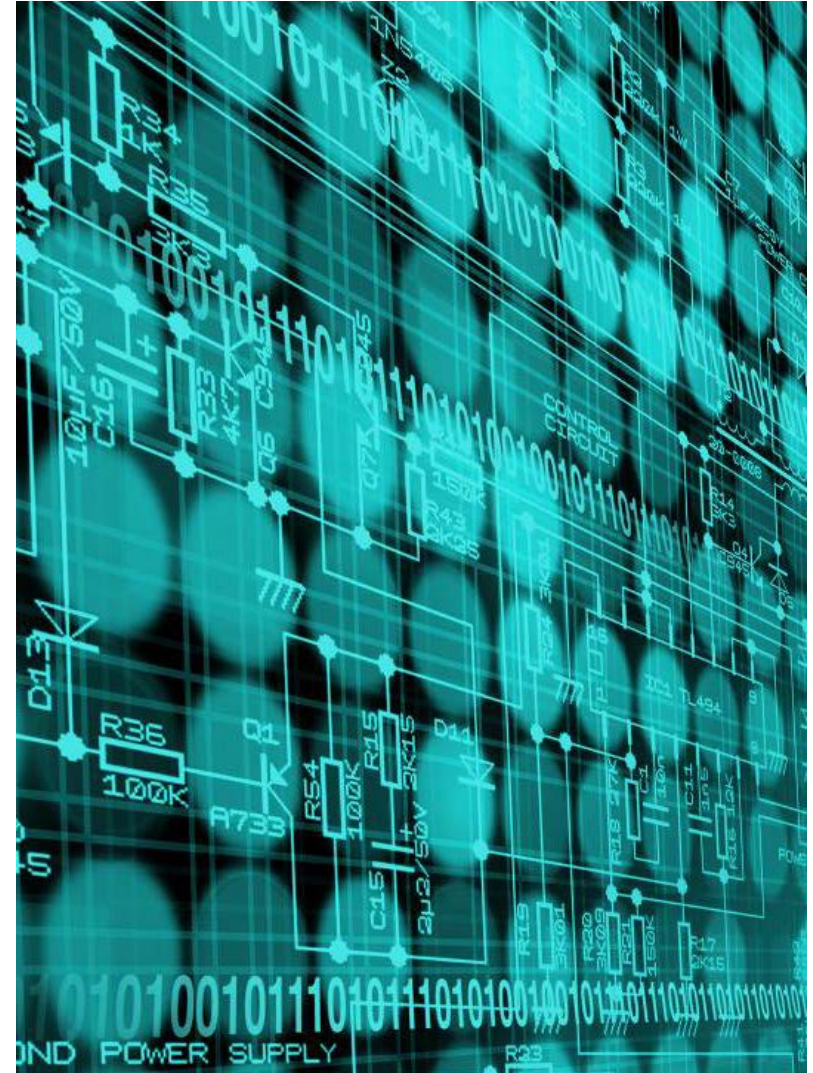


The Information and Communication Technologies (ICT) Domain at COST



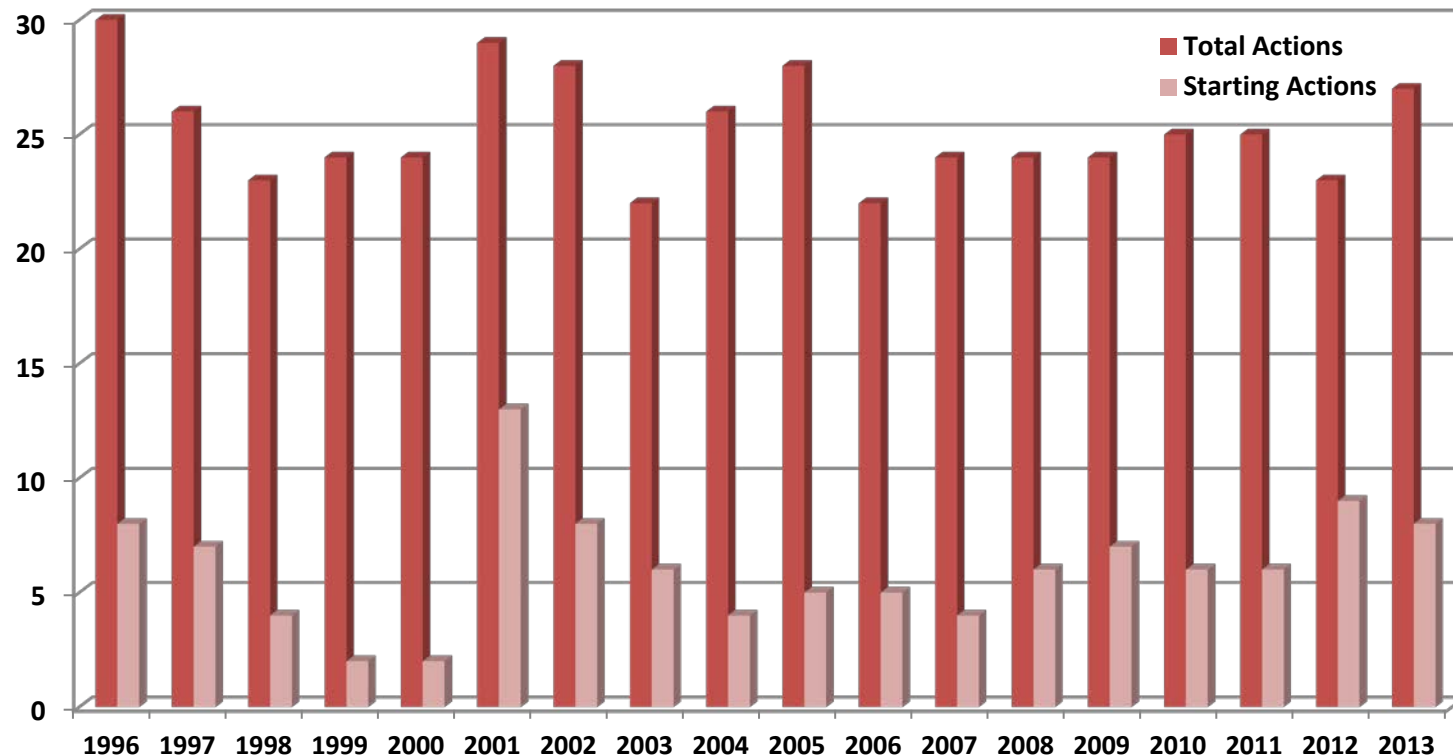
ICT Domain Description

- **Scope:**
Coordination of Research on Information Science and Technologies, Telecommunications, and Societal Aspects of ICT
- **Brief history:**
 - Until 1999: Telecommunications only
 - 1999-2006: TIST (Telecommunications and Information Sciences and Technologies)
 - 2006: Creation of ICT Domain



ICT Domain Actions

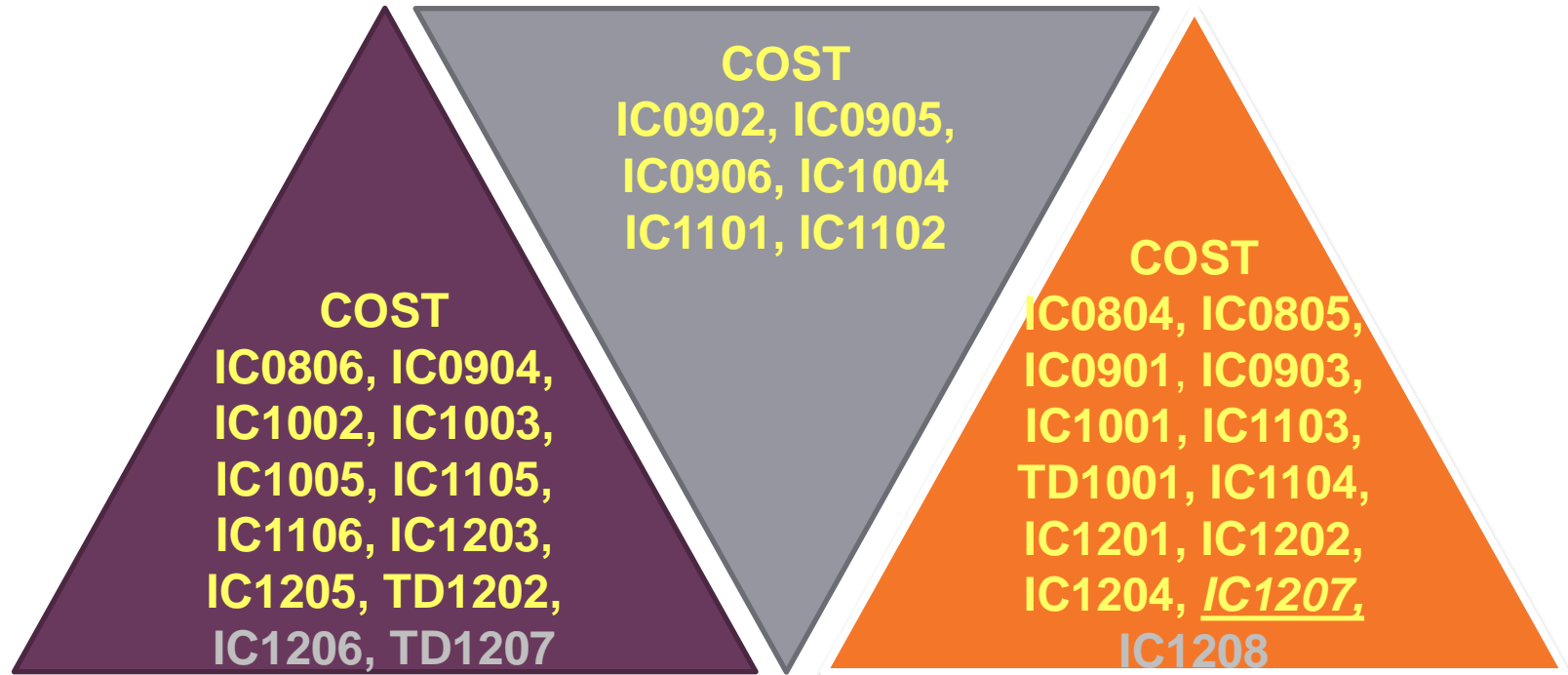
- **Actions:** 31 Actions (27 running / 4 about to Kick-Off) (Feb. 2012)
- **Impact:** > 1000 Organisations, > 3000 Researchers
- **Evolution of Actions over time (1996 – 2012):**





ICT Domain Action Portfolio

Telecommunications (6)



Societal Aspects of ICT (10+2)

Information Science
& Technologies (11+2)



Your COST Action

COST IC1207

The main objective of the Action is **to increase and enhance the ICT support of the European multilingual heritage** by bringing about a **substantial progress in the understanding and modelling of Multi-Word Expressions (MWEs)** within advanced multilingual Natural Language Processing (NLP) techniques, notably deep parsing.

Working Groups

- **WG 1: LEXICON/GRAMMAR INTERFACE.**
- **WG 2: PARSING TECHNIQUES FOR MWEs**
- **WG 3: HYBRID PARSING OF MWEs**
- **WG 4: ANNOTATING MWEs IN TREEBANKS**



Your COST Action

COST IC1207 Main Objectives

- to **put multilingualism in focus** of linguistic and technological studies,
- to **establish a long-lasting collaboration** of NLP experts **within a** cross-lingual, cross-theoretical and cross-methodological **research network**,
- to **bridge the gap** between **linguistic precision** and **computational efficiency** in NLP applications.



Your COST Action

COST IC1207 How to achieve

- addressing one of the main challenges in NLP, i.e. MWEs,
 - identification of similarities and particularities in the linguistic properties of MWEs in several European languages
 - build on previous achievements in the domain, such as language resources (lexicons, grammars and treebanks) or parsing tools
 - enrichment of these resources and tools within nationally funded projects influenced by new insights stemming from the collaboration within the Action.
 - new outcomes: such as common annotation guidelines, best practices, and new common designs of resources and tools.
 - *via a close collaboration of interdisciplinary experts*
 - *specialists will bring their expertise*
 - *via STSMs of Early-Stage Researchers in order to establish close links within groups of experts.*



Your COST Action

COST IC1207 Milestones

- contrastive multilingual report on linguistic properties of MWEs,
- contrastive cross-theoretical and cross-methodological state-of-the-art report on techniques and solutions for MWE representation and processing,
- methodology of lexicon design accounting for MWEs and valence data,
- methodology of MWE annotation in corpora,
- methodology of accounting for MWEs in grammatical resources and in parsing,
- methodology of combining data-based and knowledge-based methods in MWE-aware hybrid parsing,
- meta-grammar formalism adapted to the representation of MWEs.

→ Deadlines for Milestones have to be defined



EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



Your COST Action

Related COST Actions:

- **IC1002:** Multilingual and multifaceted interactive information access (MUMIA)
- **IS1006:** Unraveling the grammars of European sign languages: pathways to full citizenship of deaf signers and to the protection of their linguistic heritage

IC1207: Full Proposal Phase

Interested Countries : 14

Proposer : **PL**

BG, CH, CZ, DE, EE,
FR, HU, IT, NO, PT,
RS, SE, UK



IC1207: Full Proposal Phase

Participating Countries : 20

CH, CZ, DE, DK, EE,
ES, FR, HU, IL, IS, IT,
MK, MT, NL, NO,
PL, PT, RS, SE, UK





Your role as a MC Member

- It is **YOU**, who has been nominated to be a MC member.
- **YOU** are representing your **Country** in this Action
- The **SUCCESS** of this COST Action is YOUR RESPONSIBILITY.
- Be **OPEN**. Be **PROACTIVE**.
- **HELP. OFFER** yourself for activities.
- **BRING IN** your expertise (scientific, regional, etc.)
- Pass forward information, **SHARE** knowledge.
- It is your chance
 - To create or enlarge your network
 - To be recognized (in a working relationship)
- Emphasize, that you are working in this COST Action



www.cost.eu