

“Connect Innovations to Markets”

THE ROBOTICS PPP

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SPARC

The Partnership for
Robotics in Europe

SPARC, the Robotics PPP

- Why a PPP for Robotics?
- How was it established?
- The role of euRobotics?
- What is the roadmap?



Why? Robotics today

- Millions of robots in the world today – many more tomorrow,
- Not just on the factory floor, but also in hospitals, transports, fairs, shops, farms...
- Robots becoming much more intelligent, cooperative, versatile, flexible...

- Facts

- Emerging technologies
 - R&D&I challenges
 - Huge untapped potential
 - Economic and societal impact
 - Non-European competition



Pioneering technologies

- Raising investor confidence / capital
 - Proven market
 - Clear & long term signals from governments
- European Commission robotics activities
- EUROP / EURON activities
- Need for coordination / long term strategy



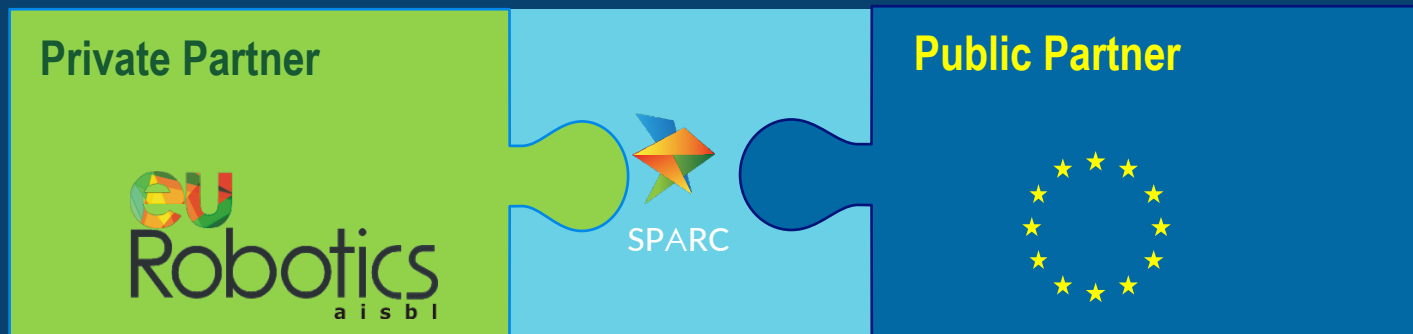
The Vision - “Connect Innovations to Markets”

- Europe in a strong position
 - Research base
 - Industrial infrastructure
 - Need to capitalise and invest
- Gathering all initiatives and active stakeholders under one banner
- Beyond research
- Size of the future Robotics market
 - Technology?
 - Economics?
 - Acceptability and adoption
- Need to engage all stakeholders



SPARC – Summary (Setup)

- A Public Private Partnership between:
 - Between euRobotics
 - The European Commission
- Strategic Aims
 - **Highlight** opportunities for research and innovation
 - **Promote** European robotics
 - **Consolidate** & develop new markets



SPARC – Summary (outputs)

- From the **private** side: Recommendations
 - Development of research & development & innovation agenda
 - Suggesting call topics, priorities, funding profile
- From the **public** side: Decisions & Funding
 - Implementation of R&D&I agenda through Horizon 2020.
 - Call 2 (ICT-24) - closed
 - Call 3 & 4 (2016/2017) - upcoming
- Joint dialogue and action



SPARC - Launched on 3 June 2014

“The largest civilian robotics research programme in the world”



- €700 M from EC
- €2.1 bn from EU Industry
- Synergy, cooperation, enabling

Timeline

- Early 2012: Idea of PPP adopted
- Sept 2012: euRobotics launched
- Sept 2012: MoU signing event with EC
- To May 2013: Internal consultation (SRA/MRA)
- June 2013: PPP submitted to EC
- Dec 2013: PPP signed with EC
- 3 June 2014: SPARC Launched
- Aug 2014: Topic Groups meeting



The Goals of SPARC - 1

SPARC will ...

1. develop strategic goals of European robotics and foster their implementation
2. improve industrial competitiveness of Europe through innovative robotic technologies
3. position robotic products and services as key enablers for solving Europe's societal challenges
4. strengthen networking activities of the European robotics community
5. promote European robotics
6. reach out to existing and new users and markets
7. contribute to policy development and addressing ELS issues



The Goals of SPARC - 2

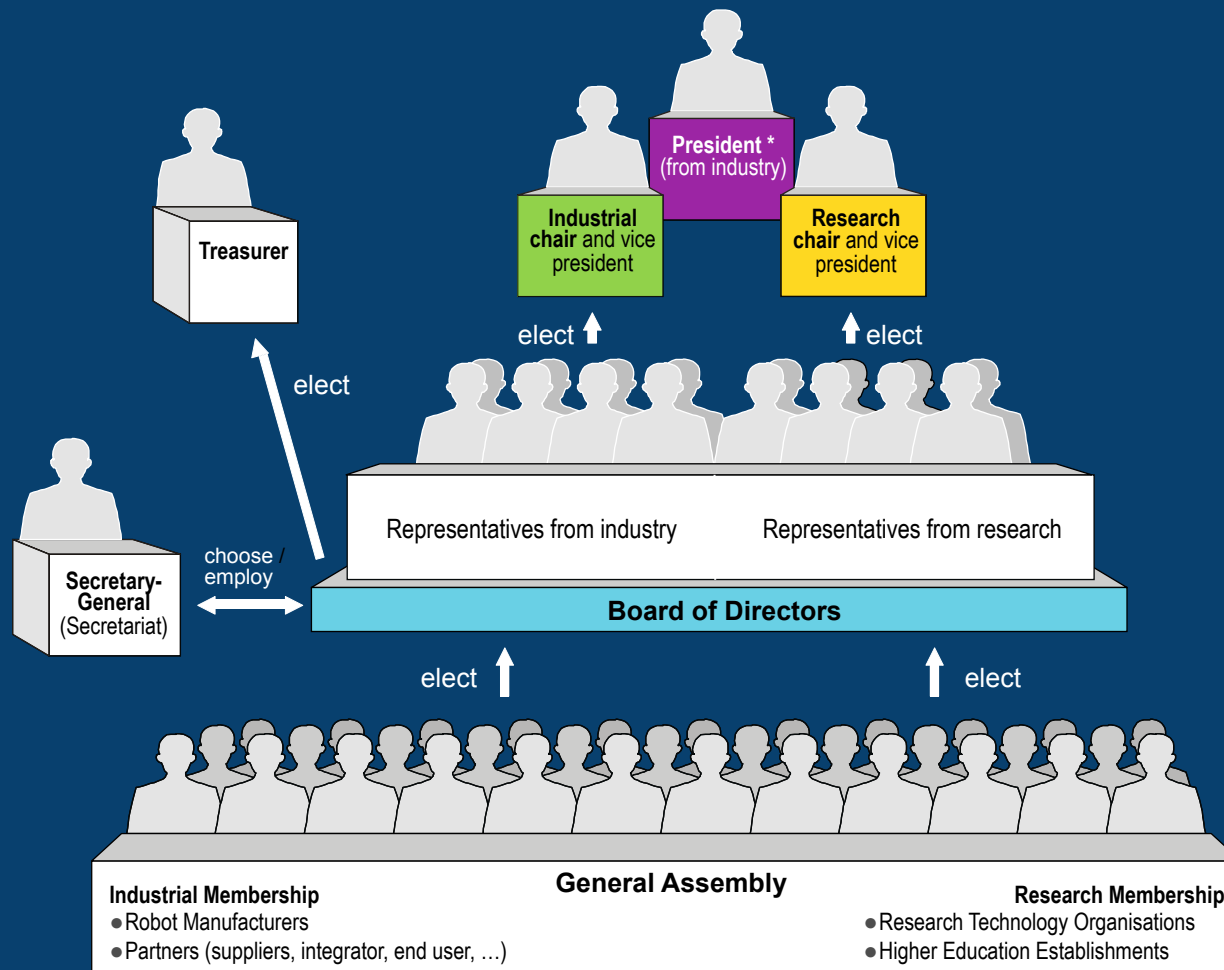
Market data (turnover)	2011 – baseline figures		2020 – conservative market development, without PPP		2020 – optimistic market development with impact of PPP	
	worldwide in (€ bn)	European share	worldwide in (€ bn)	European share	worldwide in (€ bn)	European share
Industrial robots	19.4	32%	40.0	25%	43.0	35%
Professional service robots	2.2	63%	7.8	45%	16.4	65%
Domestic and personal robots	0.5	14%	1.9	14%	2.4	20%
Sum (turnover) / weighted average	22.1	35%	49.7	28%	61.8	42%

Measured in:

- % of GDP
- Job creation
- New companies (SMEs)
- Other KPIs

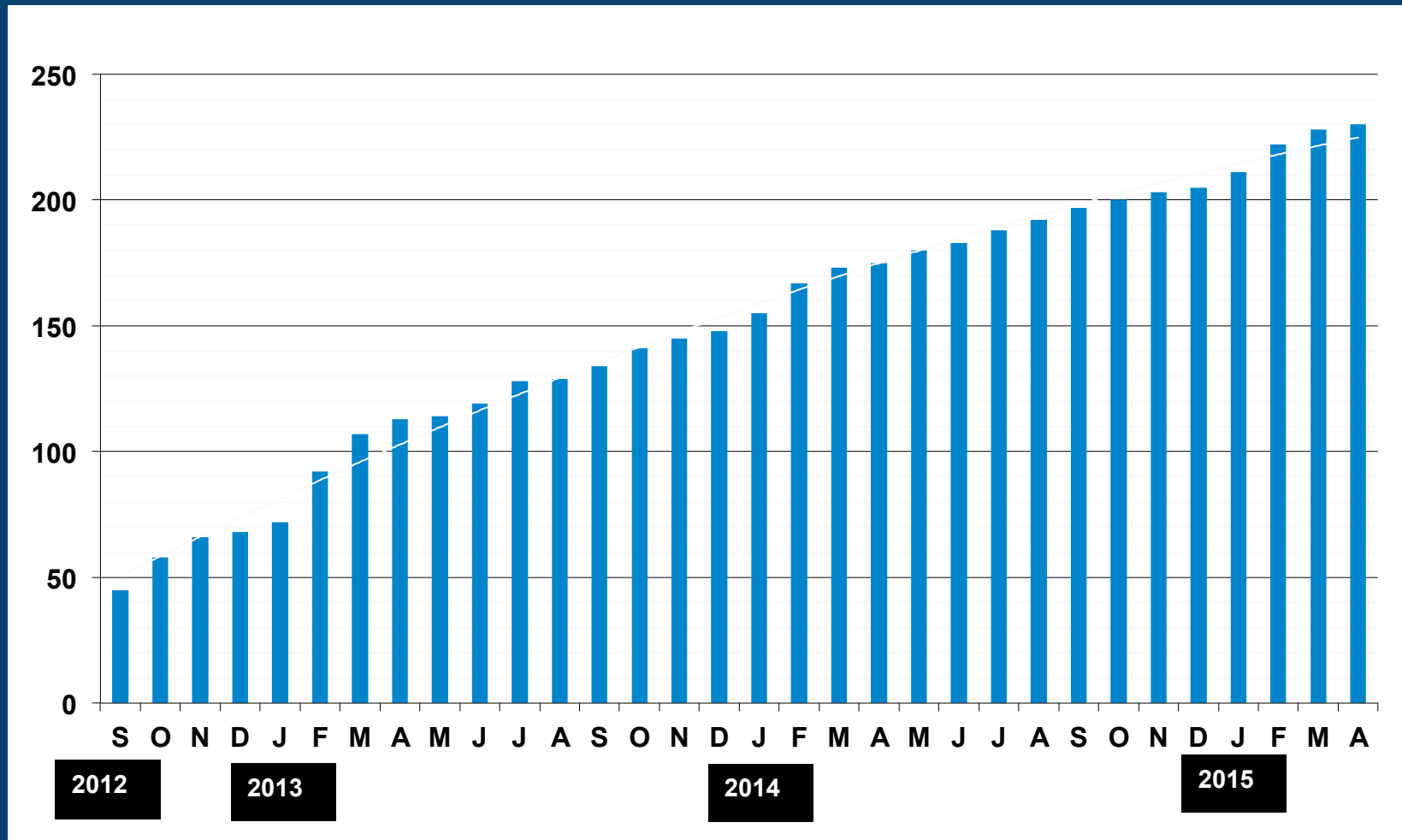


The role of euRobotics

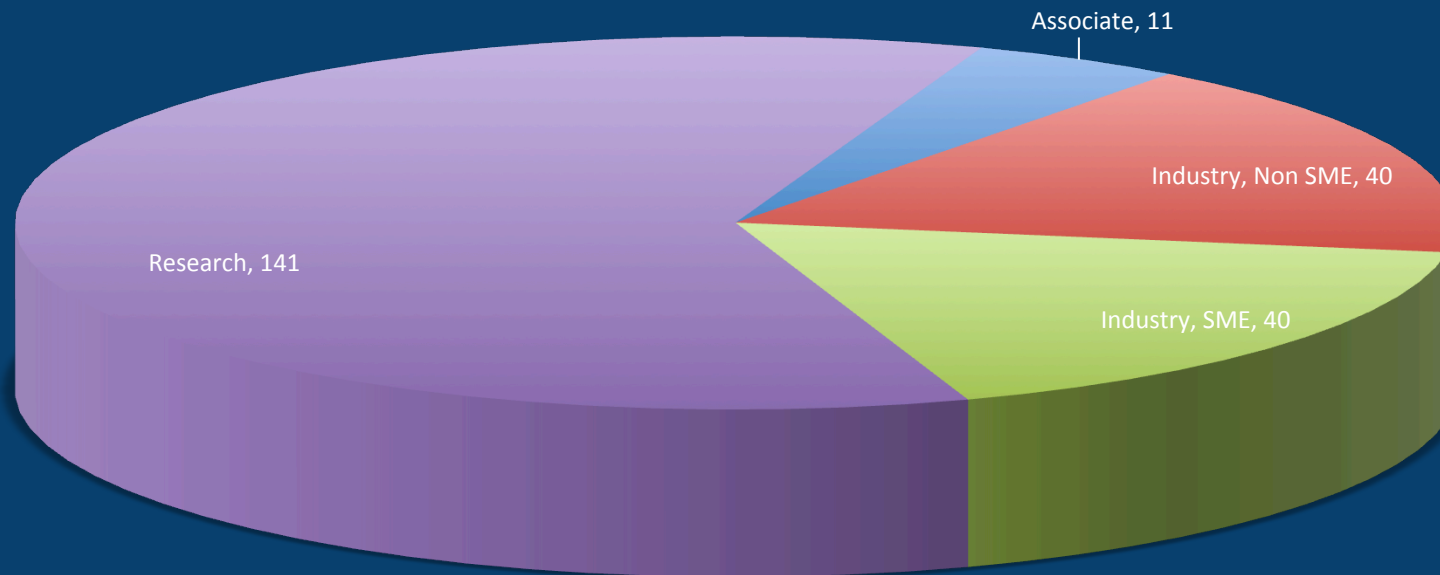


Membership Growth

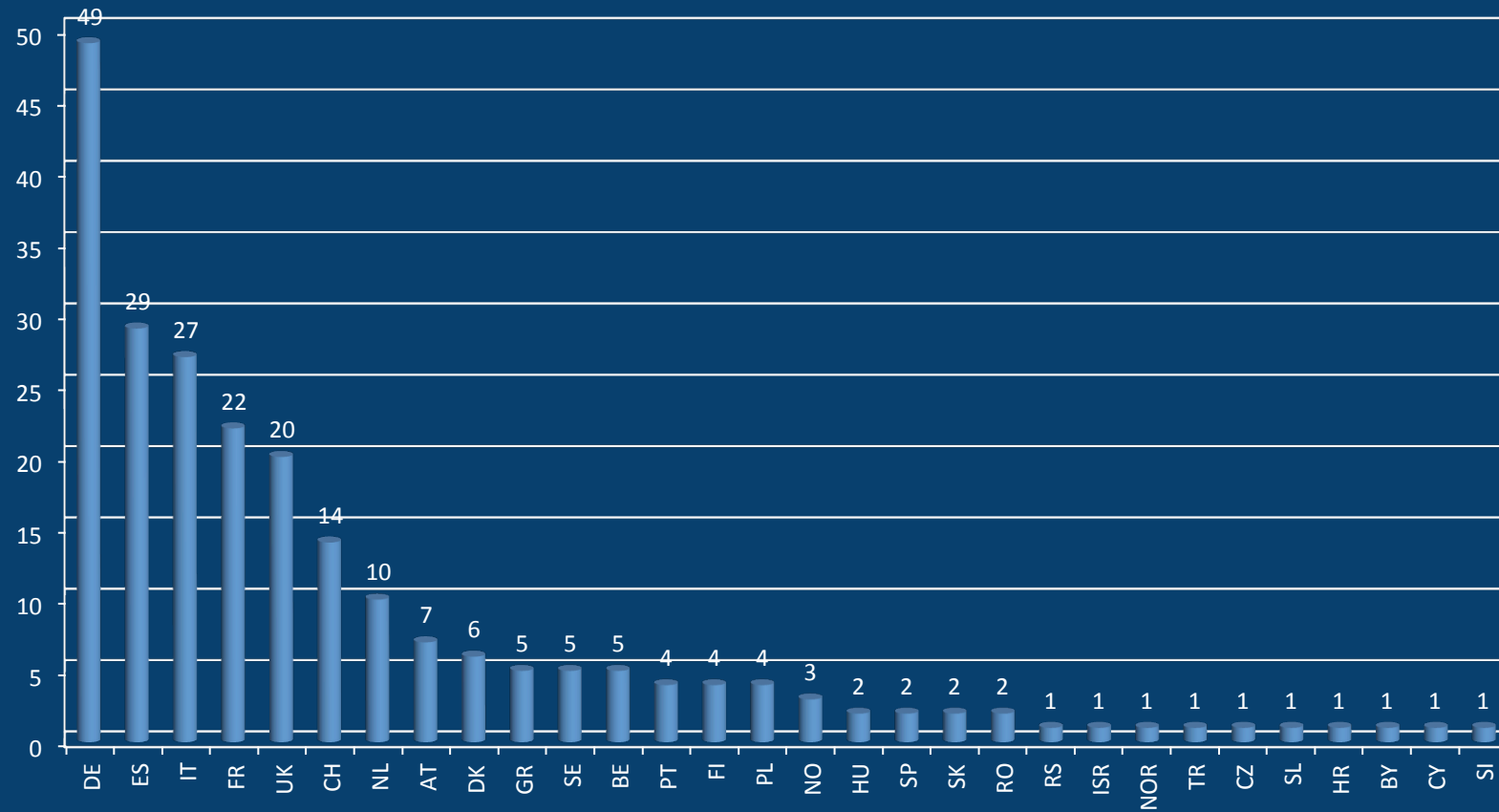
Membership: Started with 45. Year one: 115. Year two 240



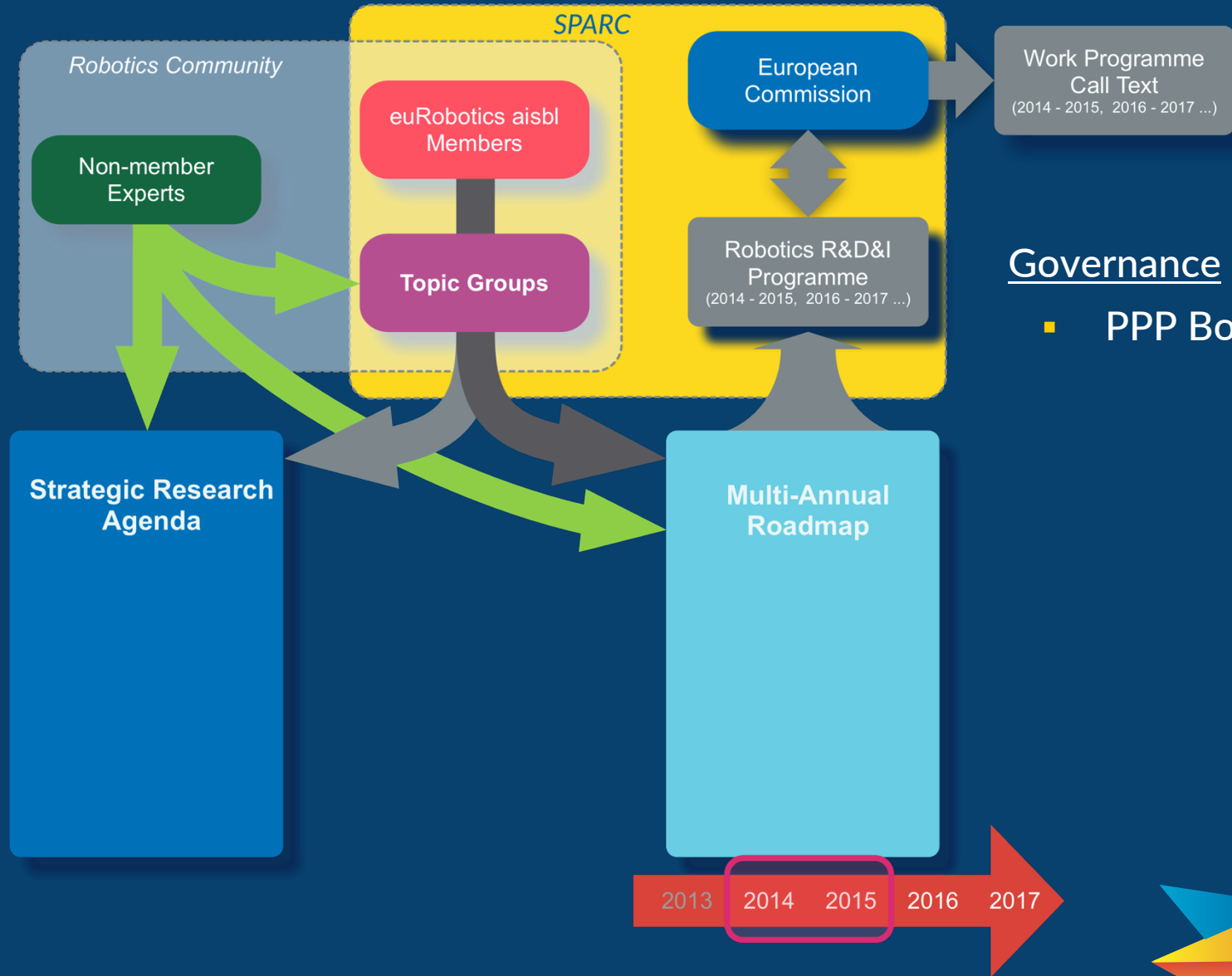
Breakdown of members



Members per Countries



SPARC Organisation

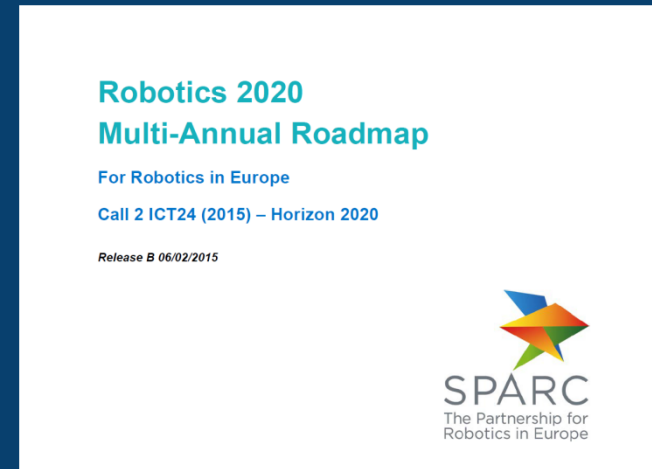


Governance

- PPP Board



SPARC documents



SRA = High level document

- wide readership
- overview of status
- sets terminology

MAR = Technical detail

- updated each year
- tracks trends

www.eu-robotics.net



The Roadmap

- Building on European research strengths
- “Pledge and Review”

• Markets & Applications

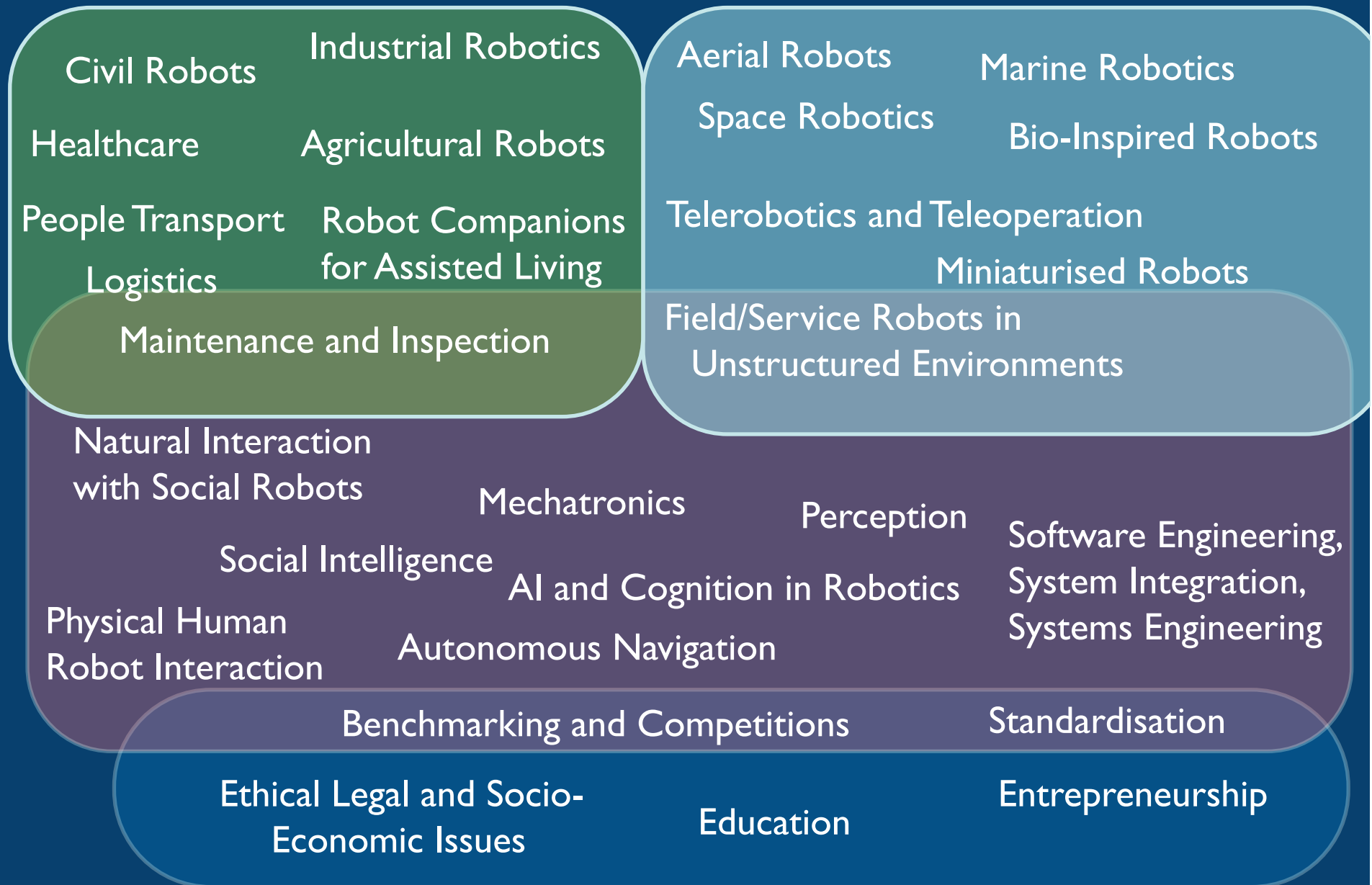
- Industrial Manufacturing
- Healthcare
- Consumer
- Logistics
- Agriculture
- Energy
- Inspection and Maintenance
- Civil

• Technologies

- Cognition
- Grasping and manipulation
- Social Interaction
- Systems engineering
- Aerial robotics
- Marine Robotics
- Big Data
- Internet of Things



The Heart - Topic Groups (Community Driven)



Indirect Benefits of the SPARC Mechanism

- Team Robotics identity
 - Makes European Robotics visible
 - Japan Strategy
 - Media
- Enabler & Booster
 - Direct & open channel between Research & decision makers
 - Attracts other stakeholders
 - end-users



Capturing the Opportunity

- Robotics is a global opportunity
- It will impact on every market sector
- Europe is well placed to build on its research investment
- Achieving SPARC aims within a global market
 - Requires collaboration
 - Focused investment
 - Technical progress
 - Joined up approach across the innovation pathway.

