

IERC



IERC - European Research Cluster on the Internet of Things

Cluster Presentation

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Internet of Things

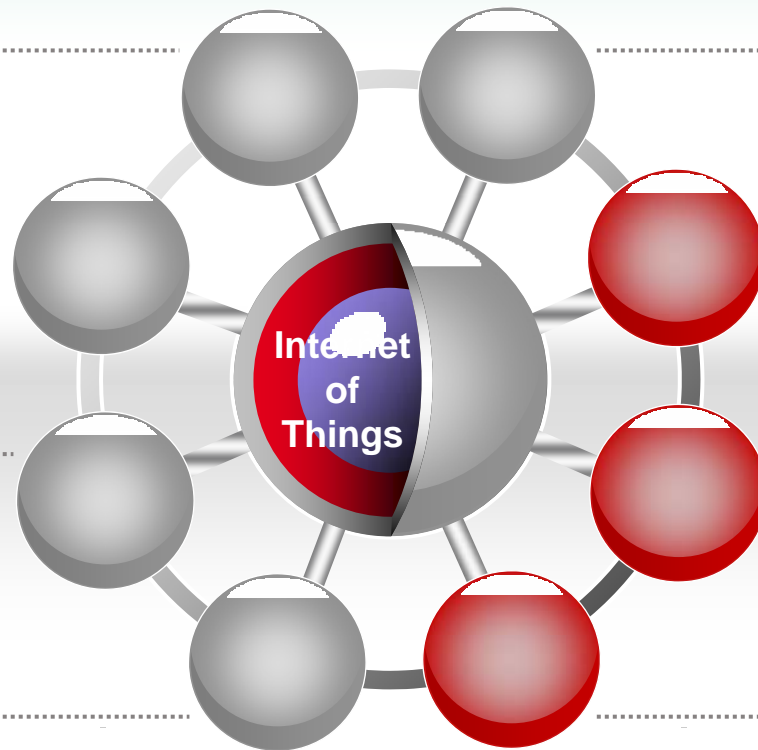
- Internet of Things (IoT) is an integrated part of the Future Internet defined as:

A dynamic global network infrastructure

with self configuring capabilities

based on standard and interoperable communication protocols

where physical and virtual "things"



have identities, physical attributes, and virtual personalities

use intelligent interfaces,

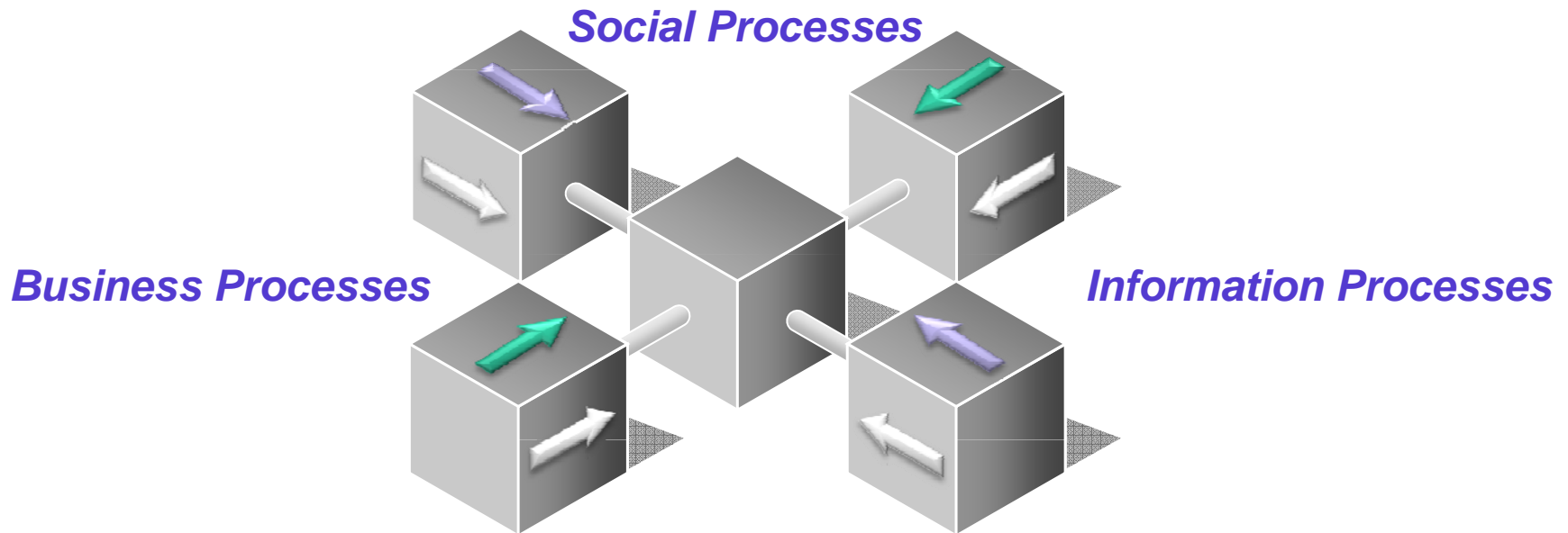
and are seamlessly integrated

into the information network.

Internet of Things

■ In the Internet of Things:

- “Things” are expected to become *active participants in business, information and social processes* where they are enabled to *interact and communicate among themselves and with the environment* by *exchanging data and information “sensed” about the environment*, while reacting autonomously to the “real/physical world” events and influencing it by *running processes that trigger actions and create services* with or without direct human intervention.

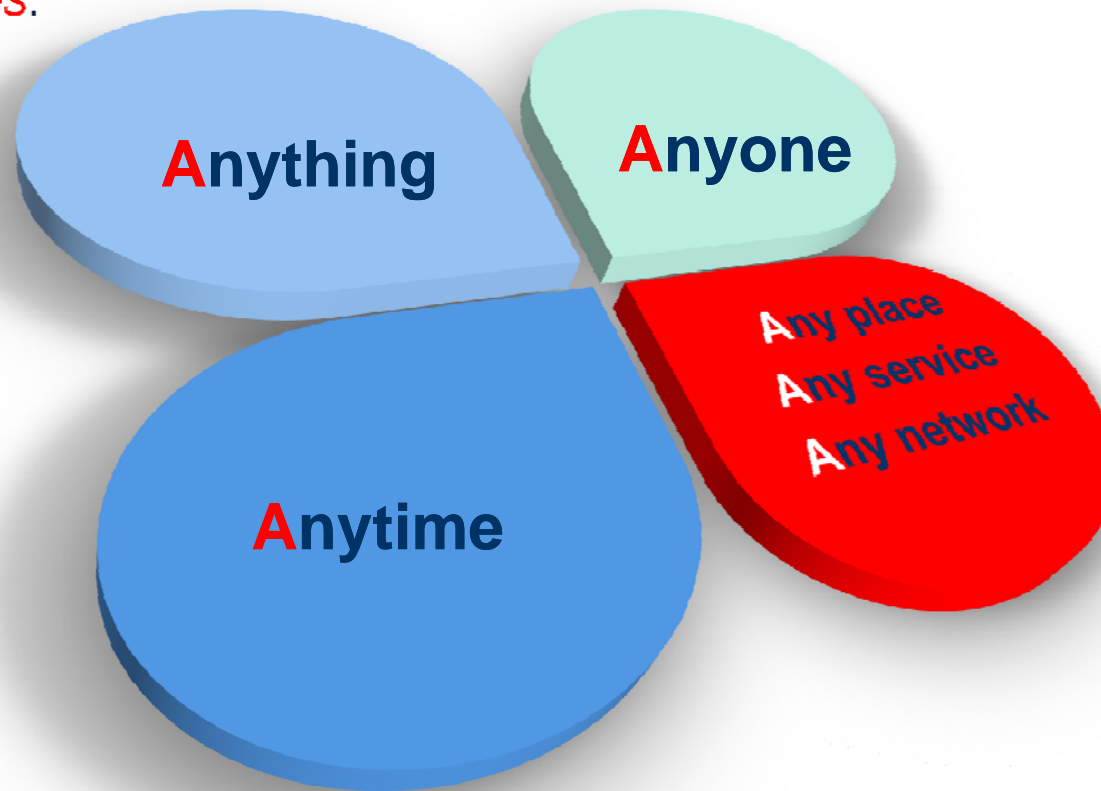


Internet of Things

■ In the Internet of Things:

- ❑ Interfaces in the form of *services facilitate interactions* with these “smart things” over the Internet, *query and change their state and any information associated* with them, *taking into account security and privacy issues*.

Connecting:



IERC - IoT European Research Cluster

- Bring together the EU-funded projects with the aim of:

Defining a common vision and the IoT technology and development research challenges



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- Address the large potential for IoT-based capabilities in Europe – *coordinate, encourage the convergence of ongoing work* on the most important issues - to build a broadly based *consensus on the ways to realise IoT* in Europe.

Encourage the convergence of ongoing work

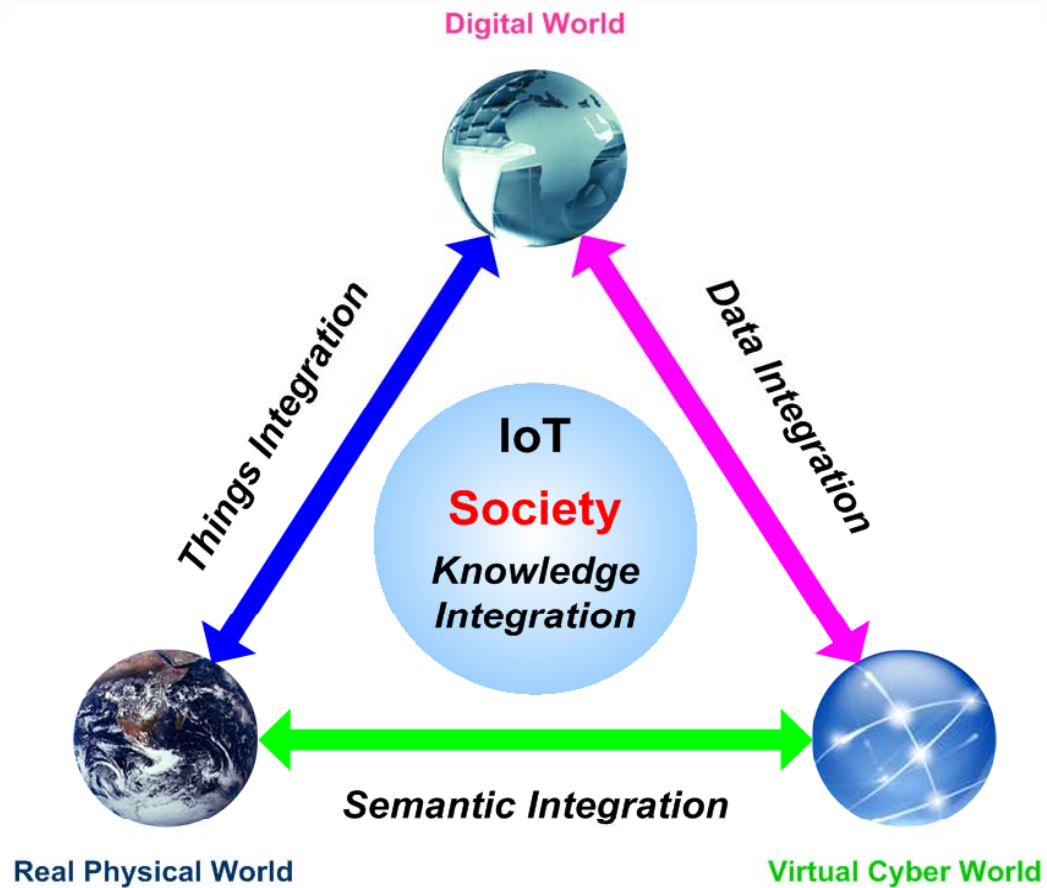
Coordinate



Build consensus

Internet of Things

A symbiotic interaction among the real/physical, the digital, virtual worlds and society



IERC Objectives

- Links its activities with the activities of the IoT Expert Group in order to minimise overlaps and maximize synergies and contributing to the overall Challenge 1 objectives.

1

Platform for a research vision for IoT activities in Europe

2

Define an international strategy for cooperation for IoT research

3

Coordinate and align the SRA agenda at the European level

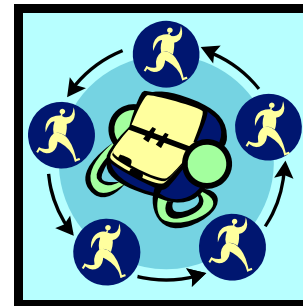
4

Organise debates/workshops

IoT European Research Cluster

■ Define and promote a common vision of the Internet of Things.

- ❑ A very important process
- ❑ Minimise overlaps, maximise synergies
- ❑ Contribution to overall Challenge 1
- ❑ Technological challenges
- ❑ Policy objectives
- ❑ Links to IoT Expert Group



EU-funded projects involved

■ EU-funded projects

□ ASPIRE, CASCADAS, CONFIDENCE, CuteLoop, DACAR, ETP EPoSS, EU-IFM, EURIDICE, GRIFS, HYDRA, IMS2020, Indisputable Key, iSURF, LEAPFROG, PEARS Feasibility, PrimeLife, RACE networkRFID, SMART, StoLPaN, SToP, TraSer, WALTER, *IOT-A, INTREPID, IOT@Work, ELLIOT, SPRINT, NEFFICS, IOT-I, CASAGRAS2.*

□ Stakeholders of closed projects BRIDGE, AITPL, AMI-4-SME, CE-RFID, CoBIS, Dynamite, PRIME, PROMISE and SMMART stay active in the Cluster

■ Cooperation with FInES and FIA/RWI

■ Cooperation ETPs – Artemis, ENIAC, EPoSS

EU-funded projects involved

- New EU funded IOT projects (budget 43 Mil €, funding 28 Mil €)
 - Architecture approaches and models,
 - Naming and addressing schemes, means of search and discovery
 - Privacy and security issues
 - Service openness and interoperability issues
 - Pre-normative and/or pre-regulatory research
 - Governance issues and models

IERC Web Space

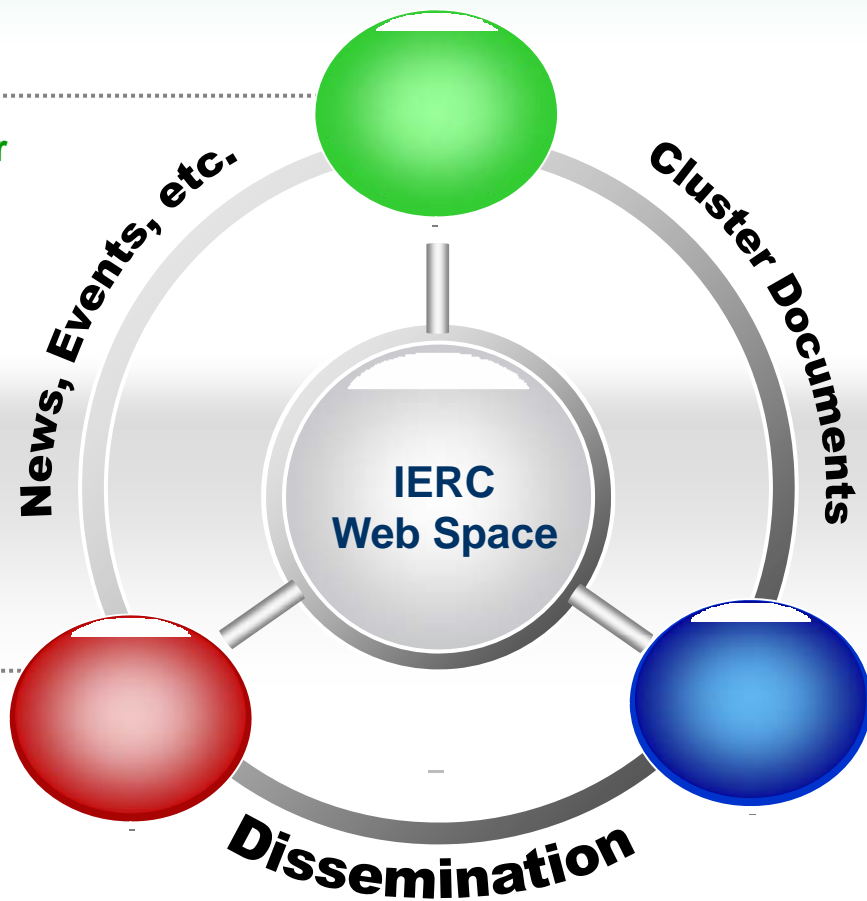
■ Projects Web Sites Links

Internet of Things Cluster
eRoom



Cluster Projects Web Sites

Internet of Things
Forum Web Site

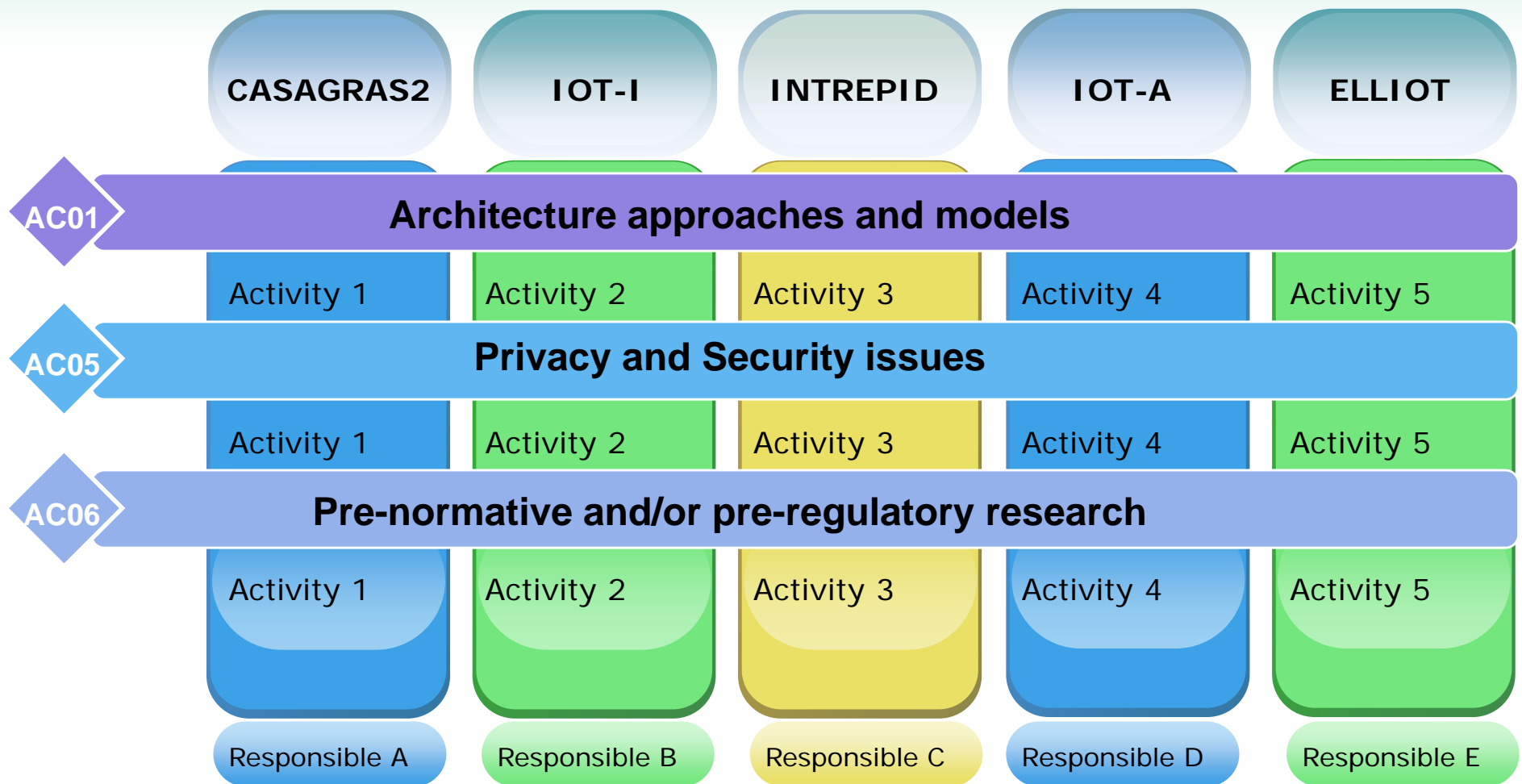


Cluster Projects Web Sites

Internet of Things Cluster
Web Site

IERC Activities Chains

■ Projects Contributions – An Example



IERC Chain Activities

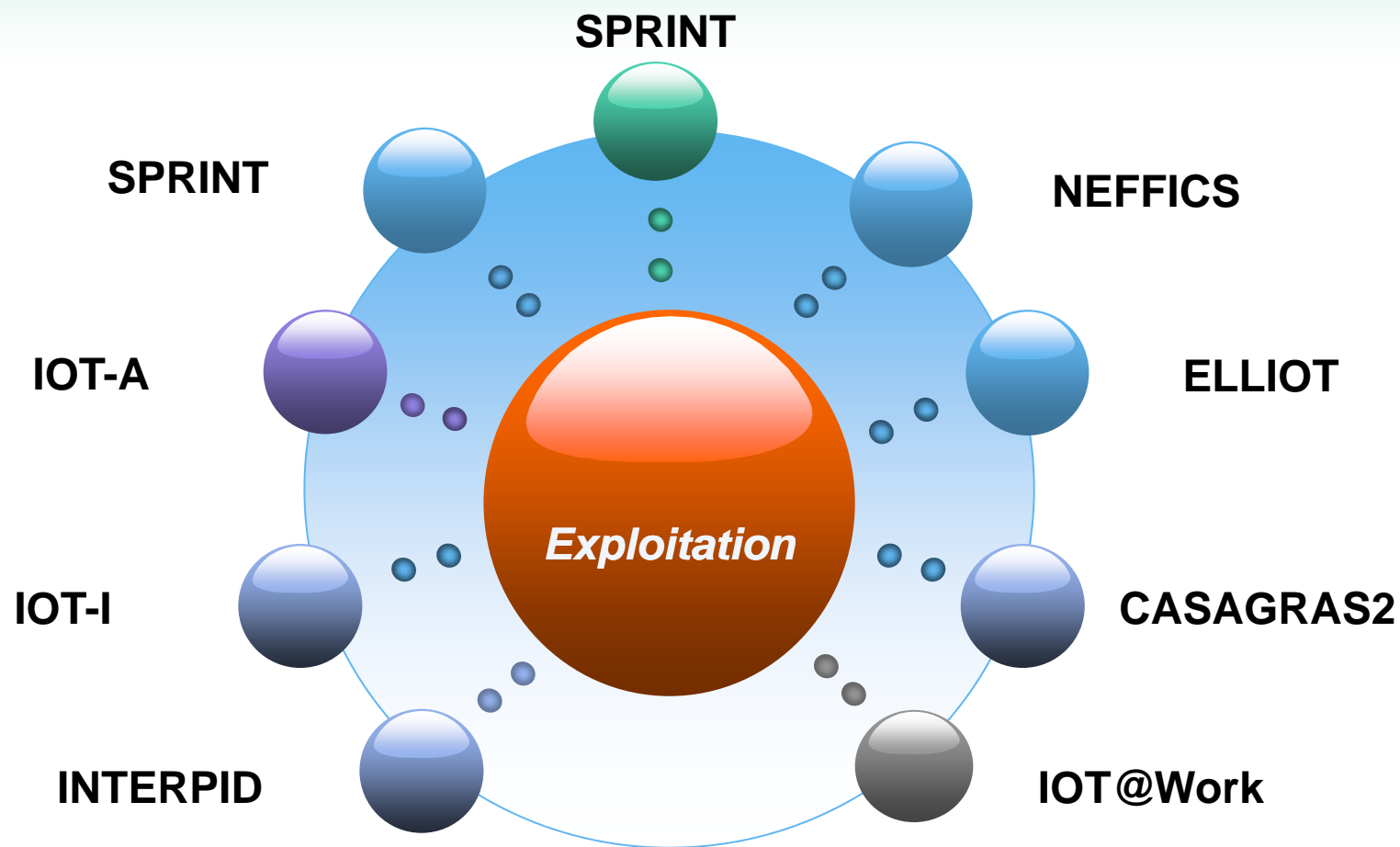
- AC01-Architecture approaches and models
- AC02-Naming, addressing, search, discovery
- AC03-Governance issues and models
- AC04-Service openness and inter operability
- AC05-Privacy and security issues
- AC06-Pre-normative and/or pre-regulatory
- AC07-Cluster support
- AC08-Link to Future Internet initiatives

IERC Chain Activities

- AC09-Contact to Member States
- AC10-International cooperation
- AC11-Application scenarios
- AC12-Dissemination - research community
- AC13-Dissemination – general public
- AC14-Exploitation
- AC15-IERC Strategic Research Agenda

IERC Activities Chains

■ New Projects Involvement



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Thank you!

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