



Runaround

Ren je Rot

Ein, Zwei oder Drei

Facts and figures about ERA



What does COST stand for?

- Competitiveness in Science & Technology
- Cooperation in Science and Technology
- Collaboration in Science and Technology



Where does the COST funding budget come from?

- 100% out of Horizon 2020
- Out of the COST fund which is fed by national contributions
- 50% from Horizon 2020, 50% from the Structural funds

COST – Cooperation in Science and Technology

Concept/Objectives:

COST is the longest-running European framework supporting trans-national cooperation and networking among researchers, engineers and scholars across Europe by funding travel costs and costs for the organisation of events as well as dissemination. It's often used as a low-threshold entry-programme to e.g. prepare a participation at other programmes like Horizon 2020.

Structure:

- COST is a **bottom-up** programme. Experts from all fields can participate.
- Running COST Actions remain **open for participation**.
- COST puts emphasis on the inclusion of **low-performing countries, industry and early stage researchers**.

Link(s)

<http://www.cost.eu>

What does “ETP” stand for?

- Euro Transition Protocol
- European Teachers' Portal
- European Technology Platform

What is the primary goal of a European Technology Platform?

- The funding of industrial driven research from EU money.
- The definition of a strategic research agenda.
- The informal networking of stakeholders from different countries

European Technology Platforms

Concept/Objectives:

ETPs are **industry-led stakeholder fora** charged with **defining research priorities** in a broad range of technological areas.

ETPs provide a framework for stakeholders, led by industry, to define research priorities and action plans on a number of technological areas.

Governance:

Some European Technology Platforms are **loose networks** that come together in annual meetings, but **others** have **established legal structures** with membership fees.

Existing initiatives:

There are **41 ETPs established** in areas like Energy, ICT, Bio-based economy, Transport, etc.

Link(s):

www.ec.europa.eu/etp

What does “EIP” stand for?

❏ European and International Project

❏ European Innovation Partnership

❏ European Innovation Platform

In which flagship was the EIP concept introduced?



HMS Bulwark



Europe 2020



Innovation Union

European Innovation Partnerships

Concept/Objectives:

EIPs streamline, simplify and better coordinate existing instruments and initiatives and complement them with new actions where necessary.

They build upon relevant existing tools and actions and, where it makes sense, they integrate them into a single coherent policy framework.

Flexibility is important; there is not a 'one-size-fits-all' framework.

Governance:

EIPs are launched only in areas, and consist only of activities, in which government intervention is clearly justified and where combining EU, national and regional efforts in R&D and demand-side measures will achieve the target quicker and more efficiently.

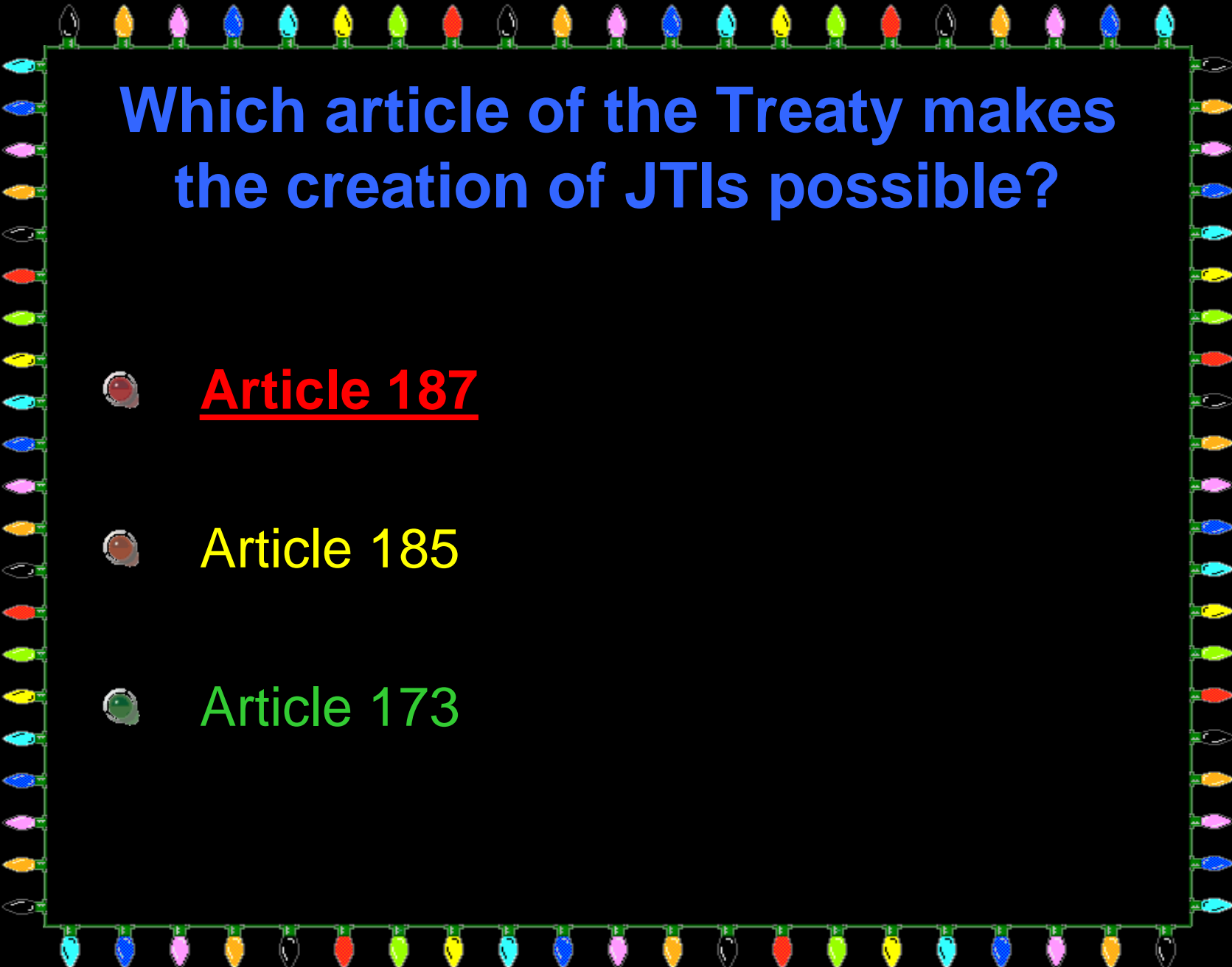
Existing initiatives:

There are 5 EIPs established in the areas of:

Active and Healthy Ageing; Agricultural sustainability and productivity; Water; Raw Materials; Smart Cities and Communities.

Link(s):

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip



Which article of the Treaty makes
the creation of JTIs possible?



Article 187



Article 185



Article 173

How many JTIs are considered for 2014-2020?

- 2: ARTEMIS & EUROSTARS
- 4: IMI, ARTEMIS, ENIAC, Clean Sky
- 5: IMI, Clean Sky, FCH, Bio-based Industries & Electronic components and systems

Joint Technology Initiatives

Concept/Objectives:

JTIs are a means to implement the Strategic Research Agendas of a limited number of ETPs.

Governance:

JTIs are Joint Undertakings set up under [Article 187](#) of the Treaty on the functioning of the European Union (TFEU) (former art. 171) as a new way of [realising public-private partnerships](#) at European level [in the field of industrial research](#).

Foreseen initiatives:

5 JTIs foreseen: [Innovative Medicines \(IMI\)](#), [Electronic components and systems](#) (previously ARTEMIS & ENIAC), [Clean Sky](#), [Fuel Cells and Hydrogen \(FCH\)](#), and [Bio-based Industries](#)

Link(s):

http://ec.europa.eu/research/jti/index_en.cfm?pg=home

How many contractual PPPs are considered for Horizon 2020?

4: Factories of the Future; Energy-efficient Building; Green Cars; Future Internet

10: FoF; EeB; Green Vehicles; 5G; SPIRE; Robotics; Photonics; High Performance Computing; Big Data; Shift2Rail

2: Photonics; Robotics

Public-Private-Partnerships

Concept/Objectives:

The Research PPPs are seen as **an effective way of mobilising public and private resources** for research activities to **stimulate a strong resurgence of specific sectors from the crisis**, giving confidence to industry to invest in long-term research even when faced with short-term economic problems.

Governance:

The research PPPs are **implemented by co-ordinating research activities across several H2020 themes** and interacting with industry through the creation of Ad-hoc Industrial Advisory Groups (AIAGs).

Foreseen initiatives:

9: Factories of the Future; Energy-efficient Buildings; Green Vehicles; Data PPP; Sustainable Process Industry; Robotics; Photonics; High Performance Computing; Advanced 5G networks for the future internet

Link(s):

http://ec.europa.eu/research/industrial_technologies/ppp-in-research_en.html

Who can apply for a new ERA-NET in Horizon 2020?

- Only non-profit research performing organisations
- All participants of research projects previously funded in FP7
- Typically national or regional research programme 'owners' or 'managers'



How many ERA-NETs have been funded so far (since FP6)?



more than 100



45



26

ERA-NET Scheme

Concept/Objectives:

Under the ERA-NET scheme, **national and regional authorities** identify **research programmes** they wish to **coordinate or open up** mutually. Under Horizon 2020 the ERA-NET scheme is designed to **support public-public partnerships** in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as **topping up of single joint calls** and of actions of a transnational nature.

Governance:

The **participants in these actions** are therefore **programme 'owners'** (typically ministries or regional authorities) **or programme 'managers'** (e.g. research councils or other research funding agencies).

Existing initiatives:

150 ERA-NETs funded so far (and 20 ERA-Net+), **60 of which still active**

Link(s):

http://ec.europa.eu/research/era/era-net-in-horizon-2020_en.html

<https://www.era-learn.eu/>

EUROSTARS is...?

- a EUREKA project
- a Joint Technology Initiative (JTI)
- an initiative after Article 185 of the TFEU

Article 185

Concept/Objectives:

Article 185 of the Treaty provides the legal basis for the participation of the Union in research and development programmes of member states.

The main objective of the coordination of national research programmes is to reduce the fragmentation of research efforts carried out at national or regional level in Europe.

Governance:

Participating EU Member States integrate their research efforts by defining and committing themselves to a joint research programme. EC provides financial support to joint implementation, and by setting-up dedicated implementation structure.

Existing initiatives:

Ambient Assisted Living (AAL); Eurostars 2; European Metrology Programme for Innovation and Research (EMPIR); European and Developing Countries Clinical Trials Partnership (EDCTP); BONUS Baltic Sea Research Programme

Link(s):

http://ec.europa.eu/research/era/art-185-in-horizon-2020_en.html

EUREKA is how old?

23 years old

31 years old

35 years old

EUREKA

Concept/Objectives:

EUREKA is an intergovernmental network launched in 1985, to support **market-oriented R&D and innovation projects** by industry, research centres and universities **across all technological sectors**.

Governance:

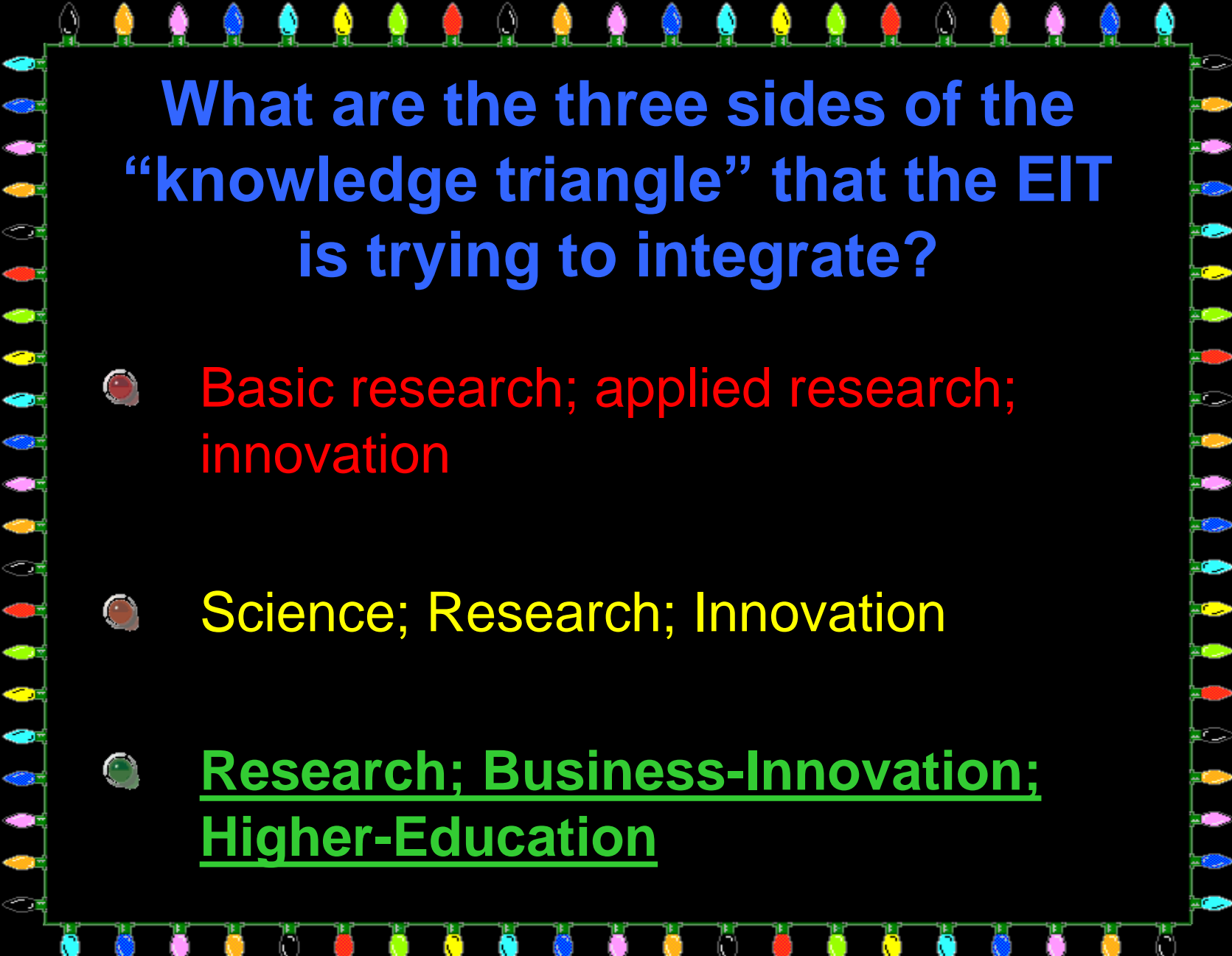
The **EUREKA High Level Group** awards projects with the **internationally recognised EUREKA label**. This label adds value to a project and gives participants a competitive edge in their dealings with financial, technical and commercial partners.

Existing initiatives:

8 Clusters, 4 Umbrellas, Eurostars and many more

Link(s):

<http://www.eurekanetwork.org/>



What are the three sides of the “knowledge triangle” that the EIT is trying to integrate?

- Basic research; applied research; innovation
- Science; Research; Innovation
- Research; Business-Innovation;
Higher-Education



How are the operational partnerships of EIT call?

- European Institute of Technology Labs (EIT-Labs)
- Knowledge and Innovation Communities (KICs)
- Partnerships Underpinning New Cooperations between Higher Education and Science (PUNCHES)

European Institute of Innovation and Technology

Concept/Objectives:

The EIT is the first European initiative to integrate fully the three sides of the "Knowledge Triangle" (Higher Education, Research, Business-Innovation) and aims therefore at transforming education and research results into tangible commercial innovation opportunities.

Governance:

Based on "Knowledge and Innovation Communities" (KICs) – highly integrated public-private networks of universities, research organisations and businesses – the EIT's activities will be coordinated by a Governing Board ensuring its strategic management.

Existing initiatives:

5: Climate-KIC (Climate Change), EIT Digital (Information and Communication Technologies), KIC InnoEnergy (Sustainable Energy), KIC Raw Materials, EIT Health

Link(s): <http://eit.europa.eu>

The term 'FET' stands for?

- Facebook enhancing technologies
- Fuel-producing engineered transgenics
- Future and emerging technologies

FET-Flagships

Concept/Objectives:

FET Flagships are ambitious large-scale, science-driven, research initiatives that aim to achieve a visionary goal. The scientific advance should provide a strong and broad basis for future technological innovation and economic exploitation in a variety of areas, as well as novel benefits for society.

Governance:

FET Flagships are envisioned to run for at least 10 years, with a budget of up to 100 M€ per year, per initiative. This can only be achieved with cooperation between the European and national research programmes.

Existing initiatives:

2 Pilots funded: Graphene-CA; The Human Brain Project

Link(s):

<http://www.graphene-flagship.eu>

<http://www.humanbrainproject.eu>

What is COSME?

- The funding programme for space research in Horizon 2020
- The future European GPS system
- A programme that aims at improving the competitiveness of European enterprises

COSME

Concept/Objectives:

The Programme for the Competitiveness of enterprises and SMEs (COSME) aims at improving the business environment and the competitiveness of European enterprises.

Governance:

Programme runs from 2014 to 2020 with a budget of € 2.3 billion.

Key Actions:

1. Access to finance for SMEs
2. Enterprise Europe Network
3. Support for initiatives to foster entrepreneurship
4. Access to markets

Link(s):

<http://ec.europa.eu/growth/smes/cosme/>

What is the budget for Horizon 2020?

ca. 75 000 million €

ca. 56 000 million €

ca. 108 000 million €



What are the three pillars of Horizon 2020?

Science; Innovation; Entrepreneurship

Excellent Science; Industrial Leadership; Societal Challenges

Excellent Science; Emerging Technologies; Societal Challenges

What best describes the 'Marie Curie' Actions ?

- Research on societal challenges (e.g. ageing, unemployment, etc.) is funded
- Mobility and career development of researchers is funded
- People with excellent ideas (potential *Nobel Price candidates*) are funded

HORIZON 2020

Concept/Objectives:

Horizon 2020 brings together all existing Union research and innovation funding, including the Framework Programme for Research, the innovation related activities of CIP and the EIT

Structure:

Three Pillars:

- Excellent Science,
 - *incl. ERC, Marie Curie, Res. infrastructures*
- Industrial Leadership,
 - *incl. access to risk finance, support for innovation in SMEs, leadership in enabling and industrial technologies*
- Societal Challenges
 - challenge-based approach bringing together resources and knowledge across different fields, technologies and disciplines

Link(s):

<http://ec.europa.eu/programmes/horizon2020>