European Physical Society

1968 - 2018

David Lee

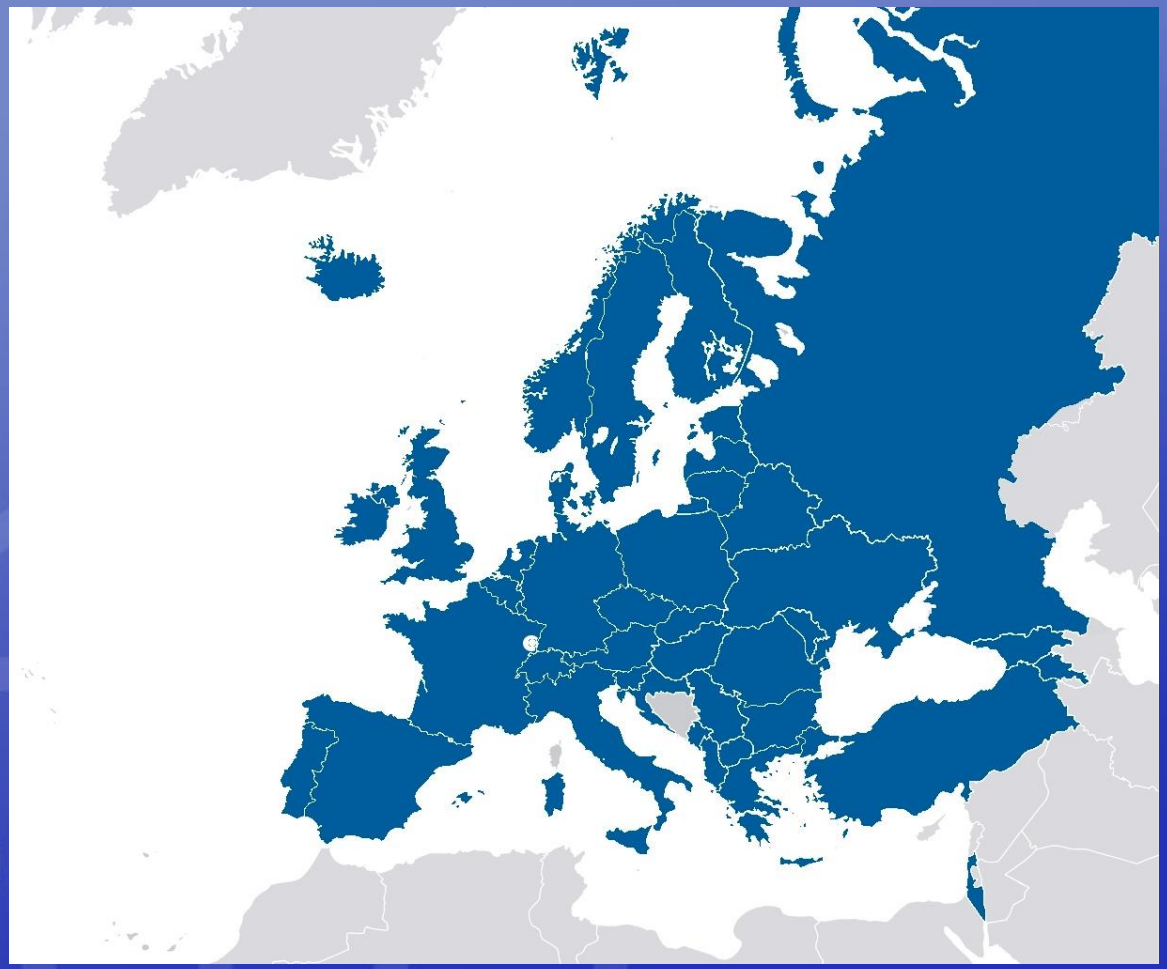
Secretary General

Presentation to the SEENET-MTP

11 June 2018

European Physical Society

The European Physical Society



42 Member Societies

Over 130,000 physicists

To promote physics in Europe

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1968 – A new perspective

December 1968
Apollo 8 view of the Earth rising over the moon, the first time our planet is seen from space !
(Photo: NASA/Getty)

Europe is divided

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1968 – Vietnam War

Hovering U.S. Army helicopters covering South Vietnamese ground troops.

April, Hue, South Vietnam: A paratrooper of 101st Airborne, guides a medical evacuation to pick up casualties during a patrol (Tet Offensive) (Photo: Art Greenspon/AP)

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1968 – Civil Rights Movement

Memphis, Tennessee
National guardsmen brandishing bayonets block civil rights activists trying to stage a protest, flanked by tanks
(Photo: Bettman/Corbis)

Memphis, Tennessee:
The civil rights leader Dr Martin Luther King Jr lying in state as his colleagues pay their respects to him.
(Photo: Keystone/Getty)

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1968 – Student revolt - Paris

May, Paris, France
A young woman challenges riot police near the Mabillon intersection, Boulevard Saint Germain
(Photo: Sipa Press/Rex Features)

May, Paris, France:
Security forces block the entrance to the Place de la Sorbonne
(Photo: Sipa Press/Rex Features)

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1968 – The end of the Kennedy era

After John F. Kennedy, killed the 22 novembre 1963 à Dallas his brother Robert F. Kennedy is fatally shot in Los Angeles on 5 June 1968 after winning California presidential primaries

June 5, Los Angeles, USA: Senator Robert Kennedy is shot while Juan Romero, a busboy at the Ambassador hotel, tries to comfort him (Photo: Boris Yaro)

1968 – The Prague Spring

20-21 August, Prague, Czechoslovakia
Emotional scenes as crowds gather after the Russian invasion (Photo: Reg Lancaster/Getty)

More tanks roll down the paved streets
(Photo: Jan and Bohumil Hajny)

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1968 – Political and Social Protest

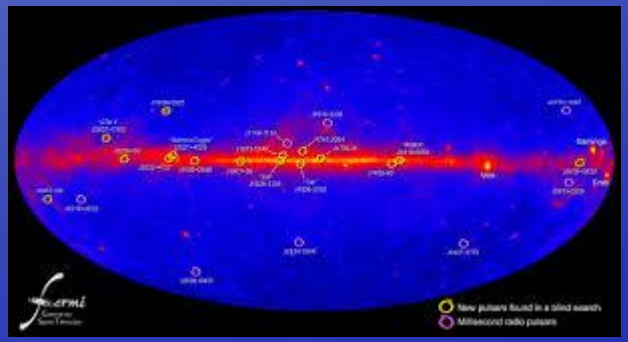
Olympic Games, Mexico

Hippies and Flower Power

1968 – Scientific progress

Astronomy

Thomas Gold explains the recently discovered radio pulsars as rapidly rotating neutron stars; subsequent observations confirm the suggestion

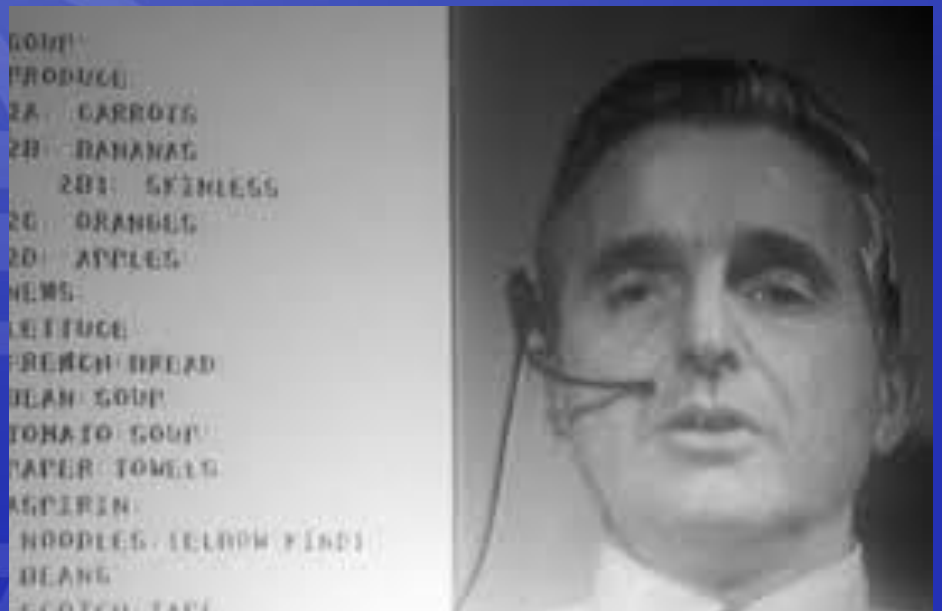


Computer Science

18 July – The semiconductor chip company **Intel** is founded by Gordon E. Moore and Robert Noyce in Mountain View, California.

1968 – Scientific progress

9 Dec. – "**The Mother of All Demos**", **Douglas Engelbart** of Stanford Research Institute demonstrates for the first time the computer mouse, the video conference, teleconferencing, hypertext word processing, hypermedia, object addressing, the dynamic linker and a collaborative real-time editor using NLS



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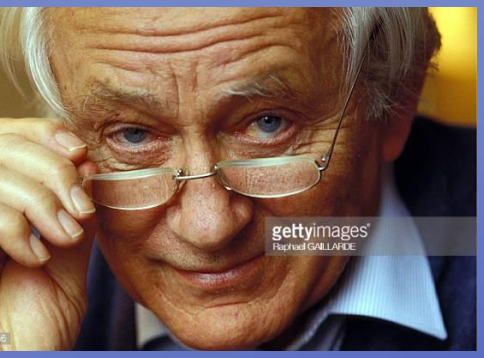
1968 – Scientific progress



Physics

Georges Charpak develops the **multiwire proportional chamber** for particle detection at CERN

Luis Walter Alvarez (1911–1988, USA) gets the Nobel Prize in Physics "for his contributions to elementary particle physics, the discovery of a large number of resonance states, made possible by using the **hydrogen bubble chamber** and specific data analysis“

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1968 – Scientific progress

Space exploration

•**15-22 Sept.** - Soviet spacecraft **Zond 5** becomes the first vehicle to circle the Moon (Sept. 18) and return to splashdown on Earth

•**11 Oct.** - Apollo program: NASA launched the first manned **Apollo 7** mission, with astronauts W. Schirra, D. F. Eisele and R. W. Cunningham aboard.

1968 – Scientific progress

Space exploration

- **24 Dec. Apollo 8** enters Moon orbit. F. Borman, J. Lovell and W. A. Anders are first humans to see the far side of the Moon and planet Earth as a whole.

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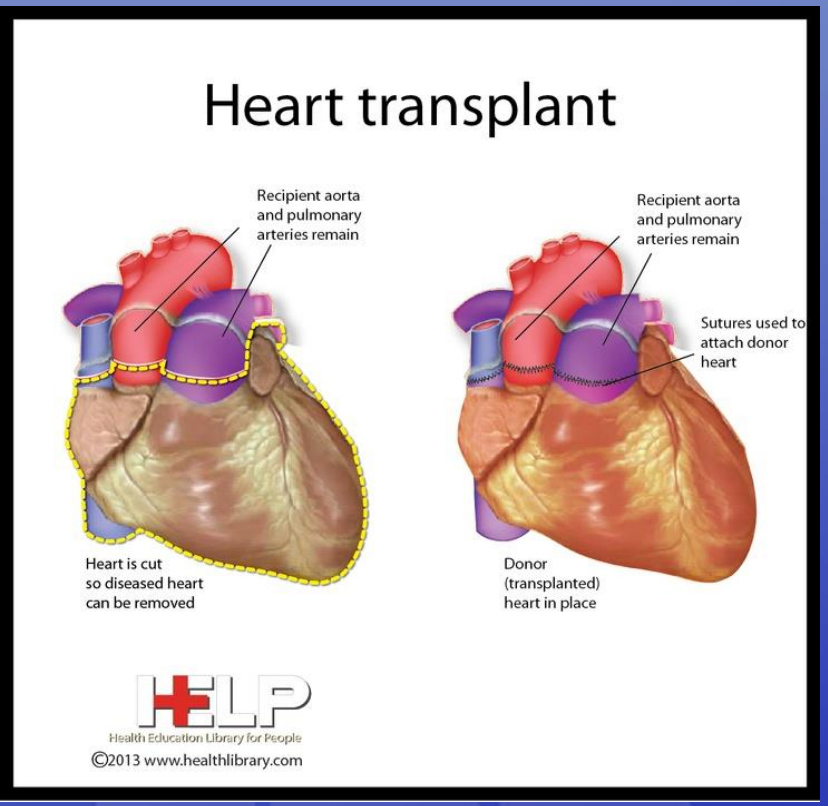
1968 – Scientific progress



Medicine

- **2 Jan**. – Dr. Christiaan Barnard performs second successful **human heart transplant**, in South Africa, on Philip Blaiberg, who survives for nineteen months.

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1968 – Cultural Events

- 4 April –2001: A Space Odyssey, based on a story by Arthur C. Clarke.

- James D. Watson – The Double Helix: A Personal Account of the Discovery of the Structure of DNA

- *Hey Jude*, by the Beatles top of the music charts

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1968 – In memoriam

- 27 March – Yuri Gagarin (born 1934), Russian cosmonaut, the first man in space.
- 1 April – Lev D. Landau (born 1908), Russian physicist.
- 28 July - Otto Hahn (born 1879), German chemist,1944 Nobel Prize in Chemistry.
- 27 October - Lise Meitner (born 1878), German physicist, discoverer in 1939, with Otto Hahn, of nuclear fission.

1968 – The foundation of the EPS

- Nov. 1965: G. Bernardini shares his idea of EPS at the SIF meeting in Bologna
- 16-17 April 1966: Approval of the initial resolution at a special meeting in Pisa
- 25 Nov. 1966: Steering Committee + Nat. Phys. Soc. meeting at CERN: no final agreement

1968 – The foundation of the EPS

- 16 May 1967: New meeting in London: agreement on individual, collective & associate membership
- 30 Jan. 1968: Steering Com. Meeting at Batelle, Geneva decision to hold founding meeting in Sept. 1968

1968 – The foundation of the EPS

- 3-4 May 1968: Steering Com. Meeting in Prague to discuss better involvement of Eastern EU countries
- 12 Sept. 1968: Emergency meeting of Steering Com. decision to go ahead as planned (after Prague invasion)

1968 – The foundation of the EPS

- 26 Sept. 1968: EPS constitutive assembly in Aula Magna, University Geneva
- G. Bernardini: first president of EPS
- Secretariat: first at CERN, then Institut Battelle, finally in Petit-Lancy (GE)
- Branch secretariat in Prague, Czech. Academy of Science, until 1973

1968 – The foundation of the EPS

- 8-12 April 1969: Inaugural Conference in Florence, first of triennial conference “Trends in Physics”, and first EPS General Meeting

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1968 – The foundation of the EPS

- *"… as a further demonstration of the determination of scientists to collaborate as close as possible in order to make their positive contribution to the strength of European cultural unity"*

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Priorities

Services to Divisions

Public Awareness

European Integration

International Cooperation

Advocacy for the physics community

Publication

Next Generation

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EPS 50

Symbolizes deformation of space-time by a mass according to Einstein's general relativity theory

Old or new ?

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EPS 50

TOPICS

- Lasers for communication
- MRI for Medical Diagnostics
- GPS for Localisation and Navigation
- Particles for Health
- Physics for cultural heritage
- Modelling for climate change
- Innovative materials for sustainable Energy
- Spectroscopy for environmental monitoring
- Fundamental science in your pocket - the smartphone
- LED there be light
- Nanotechnology for clean water
- Radio waves for tracking and identification

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EPS 50 – Special Sections in EPN

TOPICS

- 1968 THE FOUNDATION OF EPS
- EAST WEST RELATIONS
- THE EPS STAFF 1968-2018
- STUDENT MOBILITY
- THE HISTORY OF EPN
- THE HUNGARIAN CONNECTION
- EPS AND THE MOVE TO MULHOUSE

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EPS 50 – Festackt

- **Location: Aula Magna University Building ‘Les Bastions’, Geneva**
- **Time : Friday 28. Sept. 2018 afternoon 14.00 – 18.30**

Speakers

- Serge Haroche, Nobel Prize 2012
- Carlos Moedas, European Commissioner for Research
- Ernst von Weizäcker, Vice President Club of Rome
- Luisa Cifarelli, President of the Italian Physical Society and past EPS President

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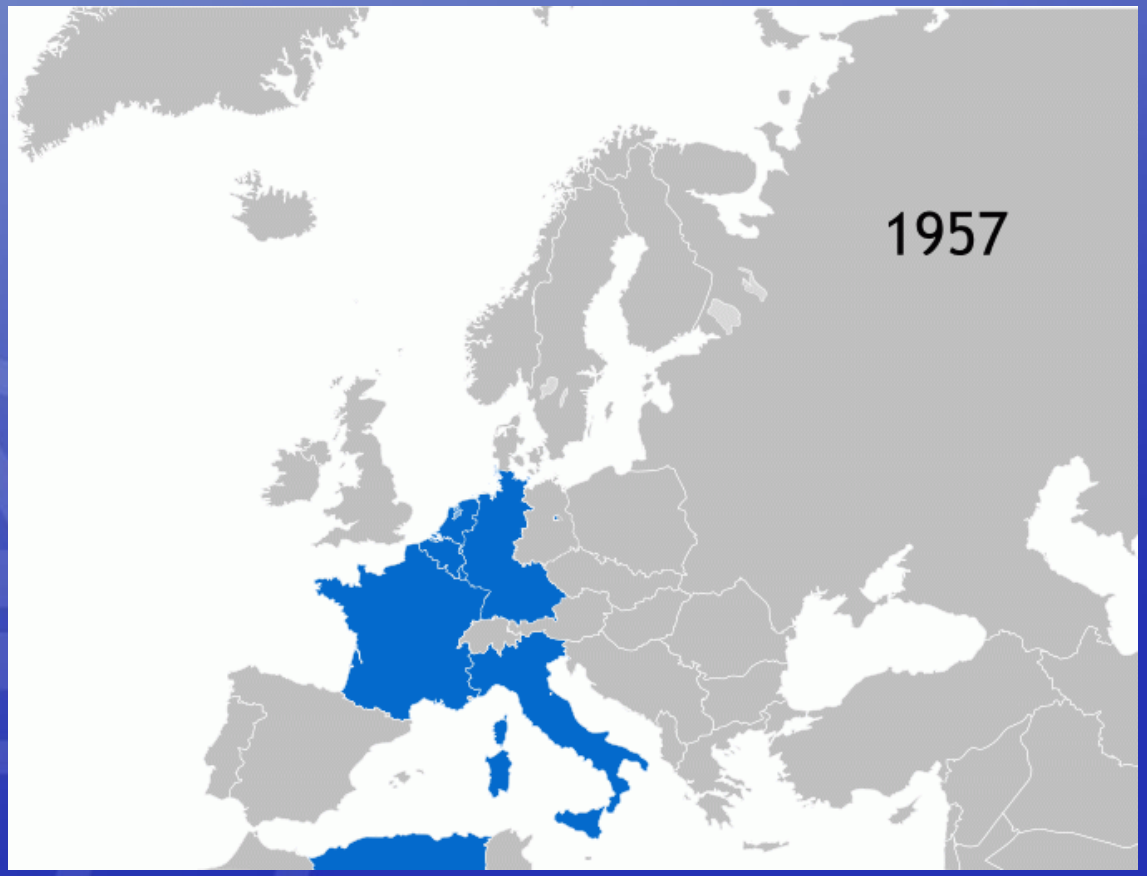
EEC



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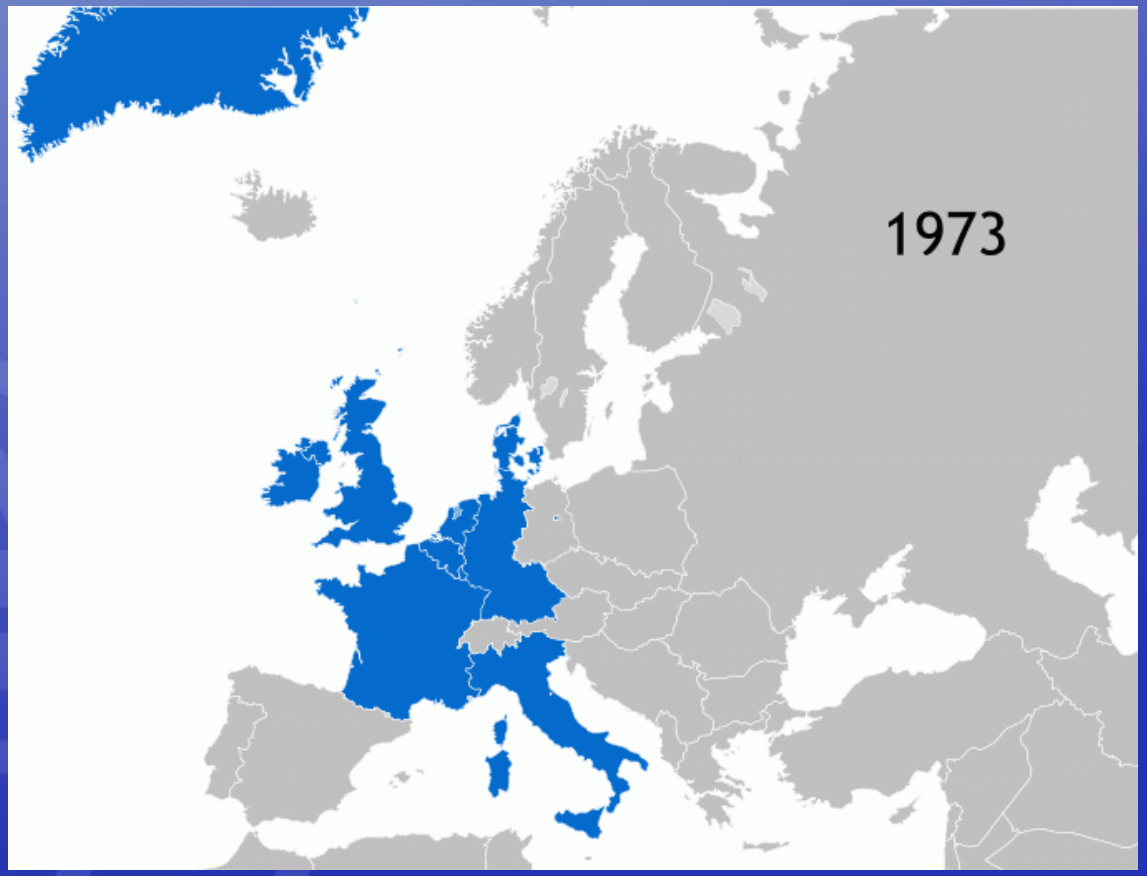

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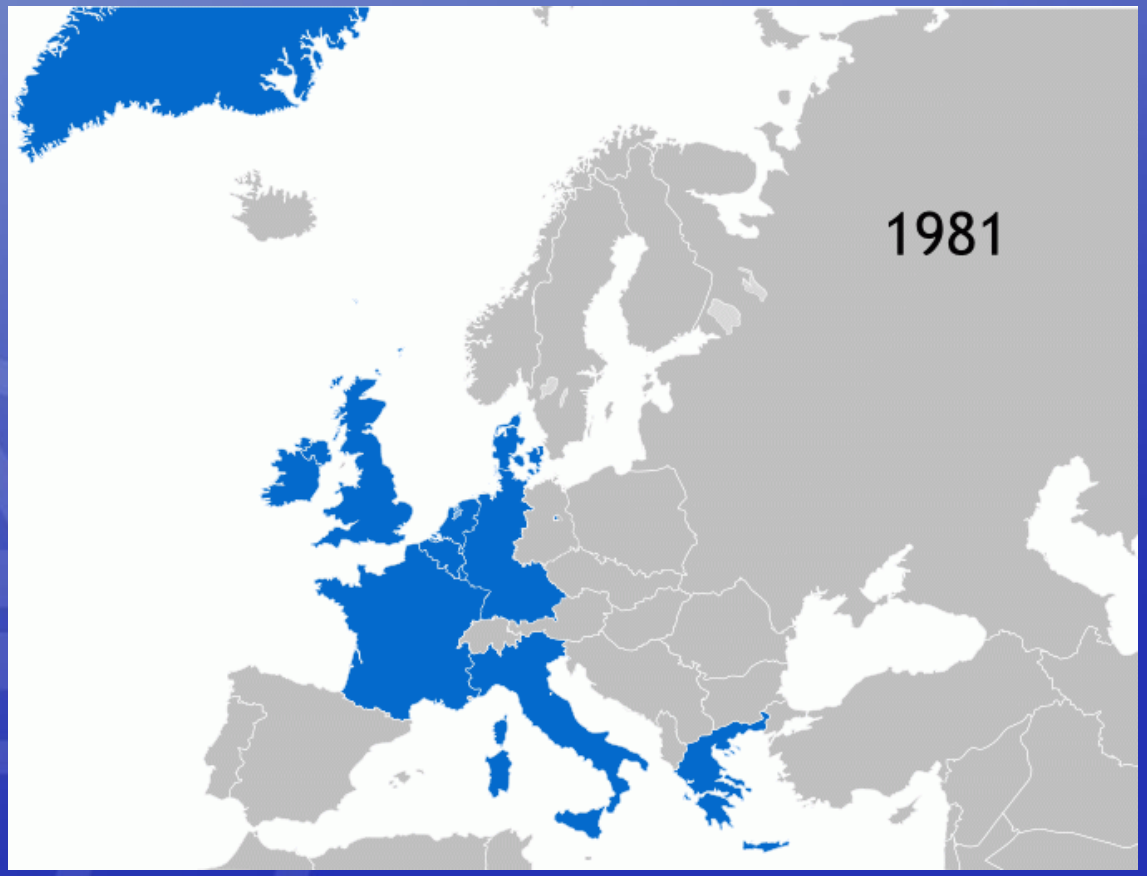

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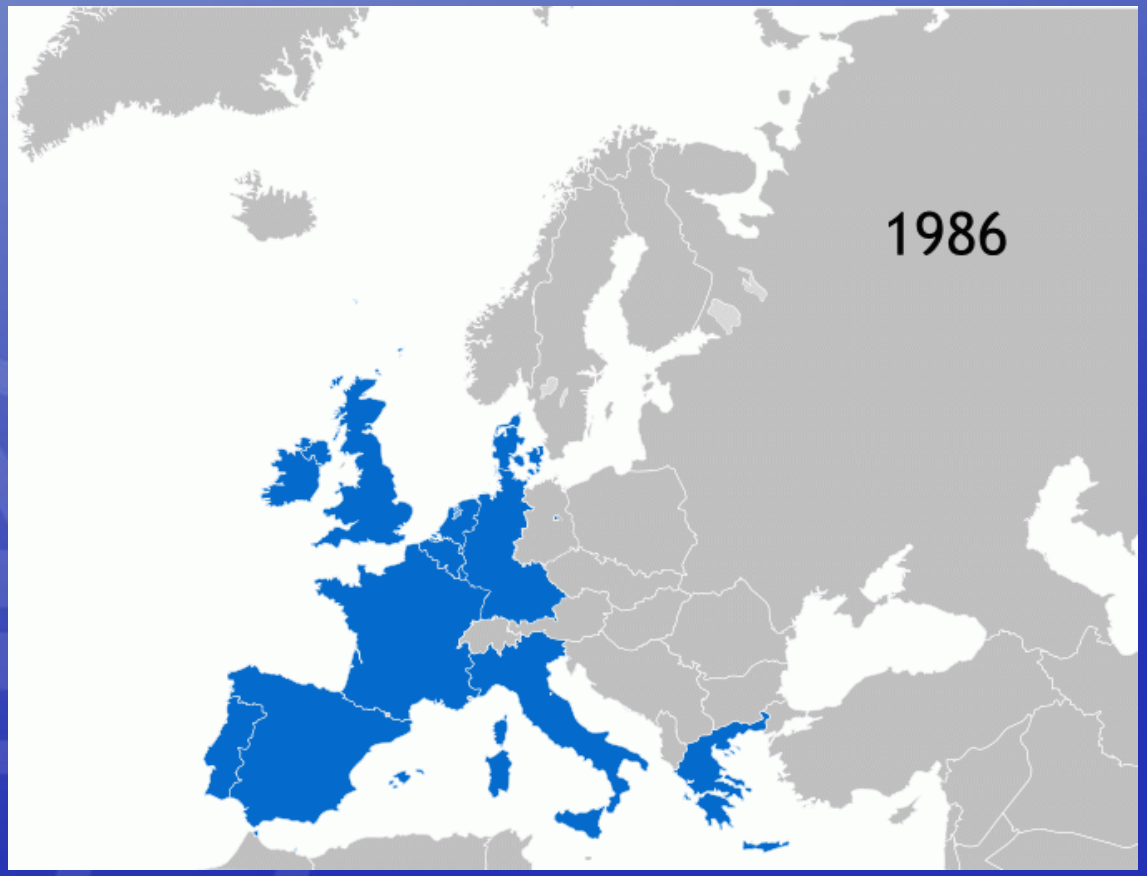

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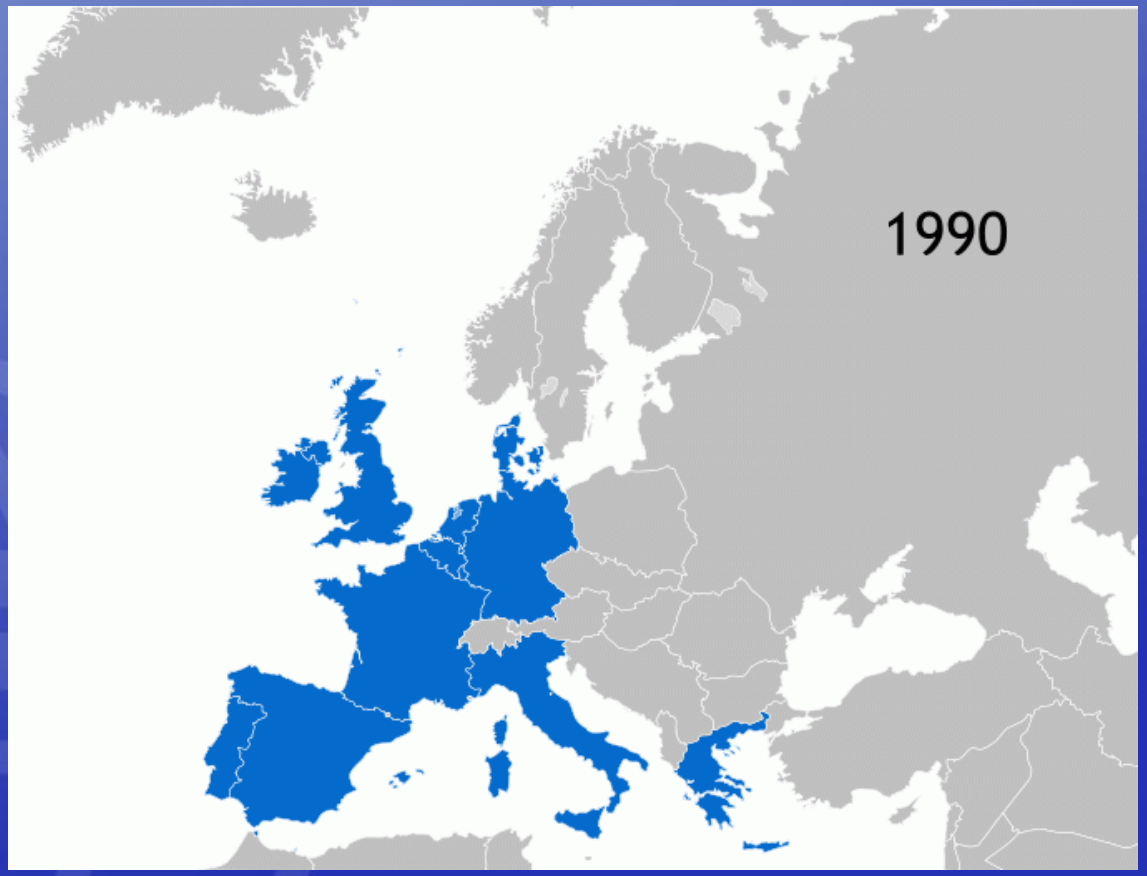

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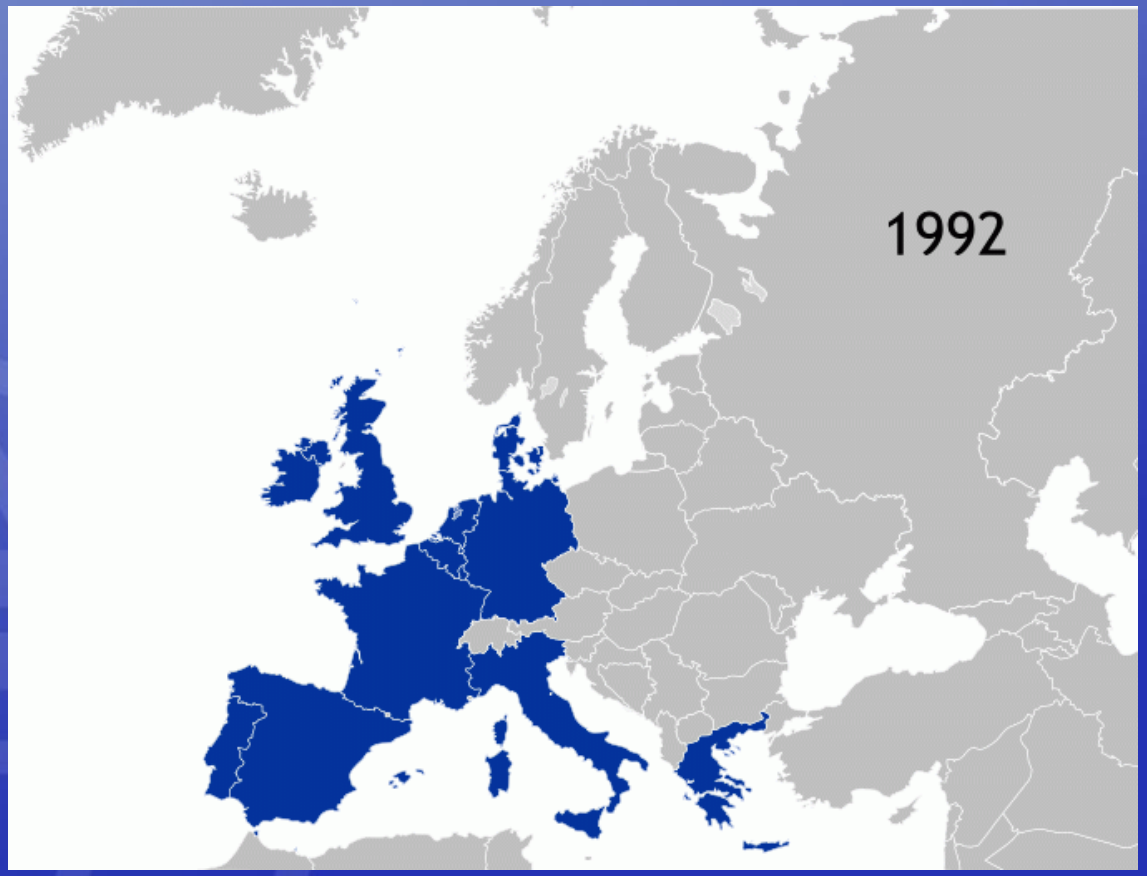
EU



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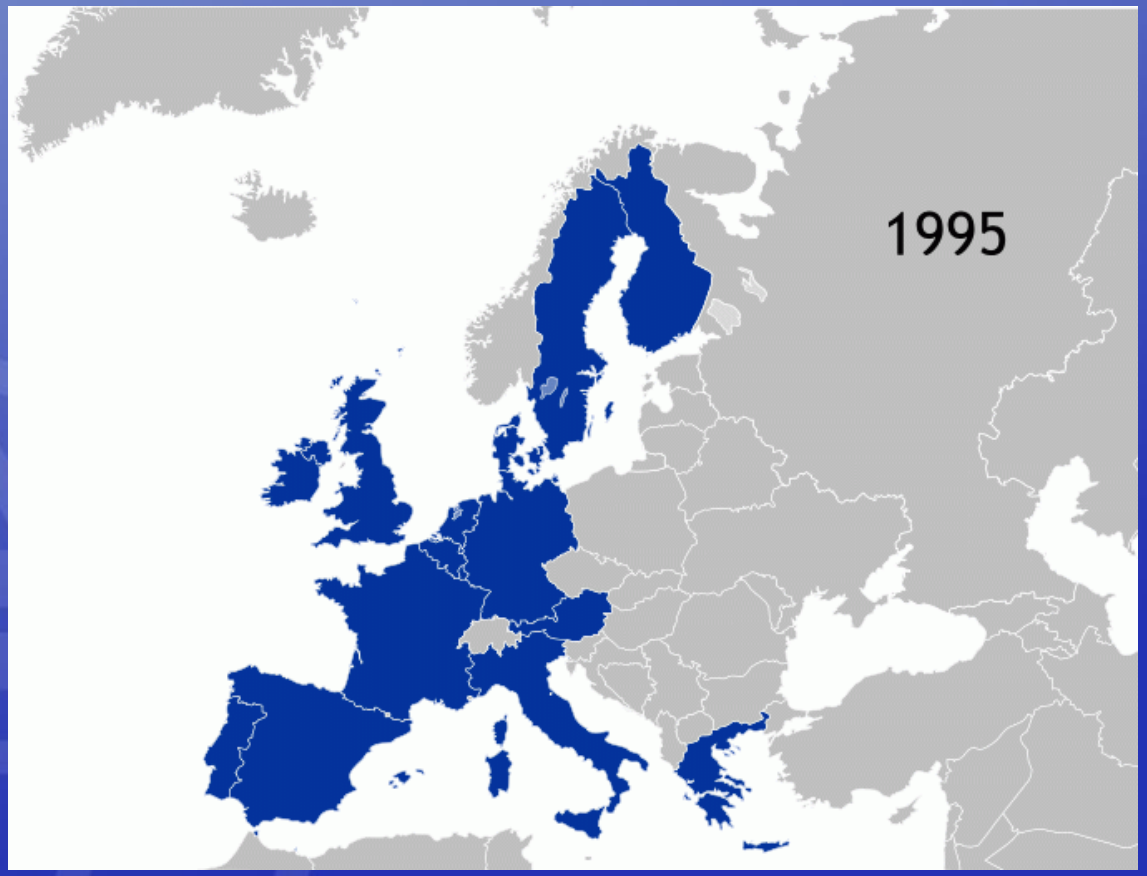
EU



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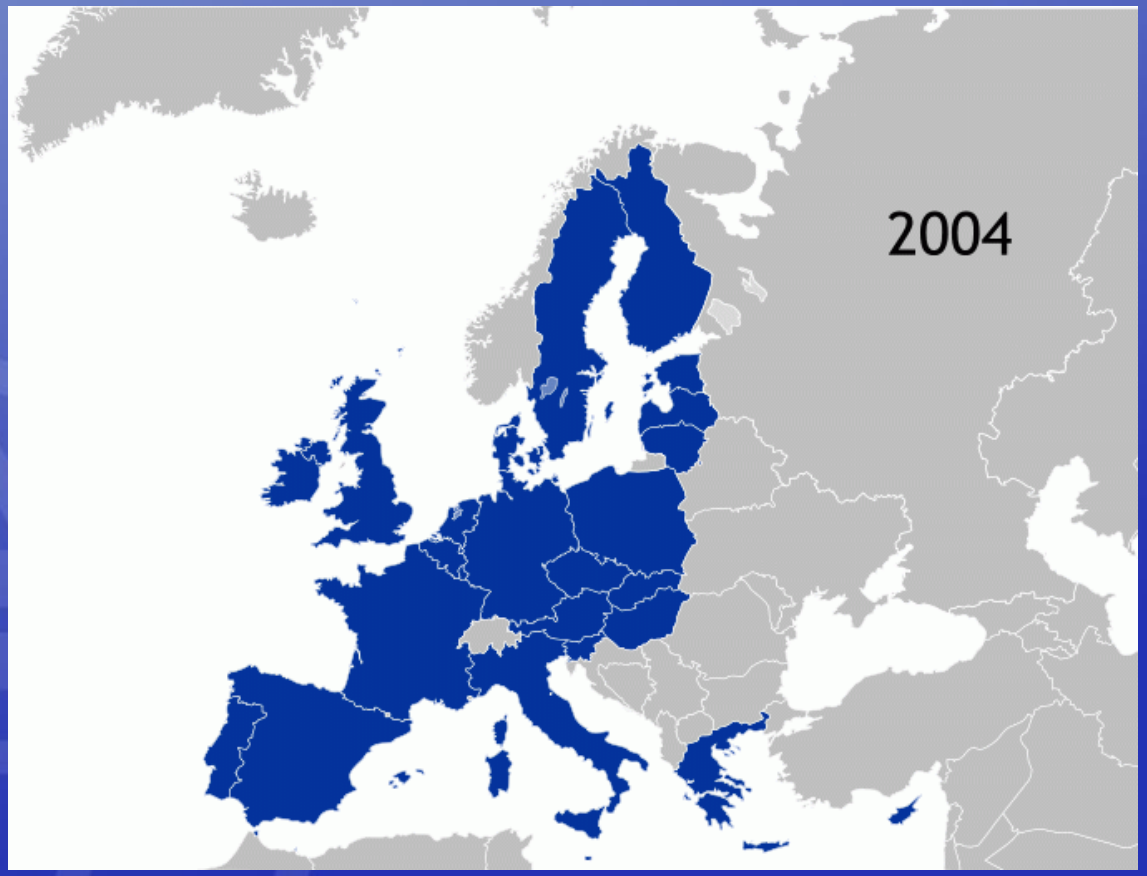

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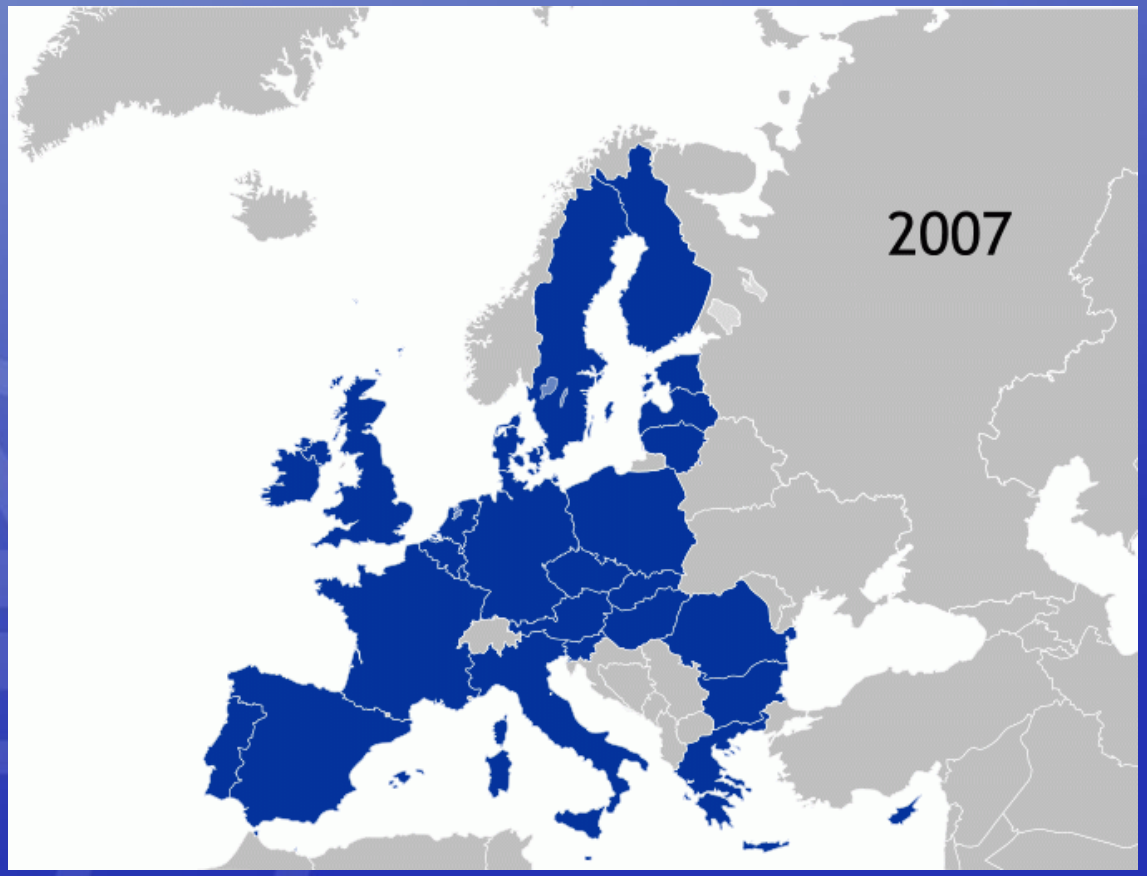

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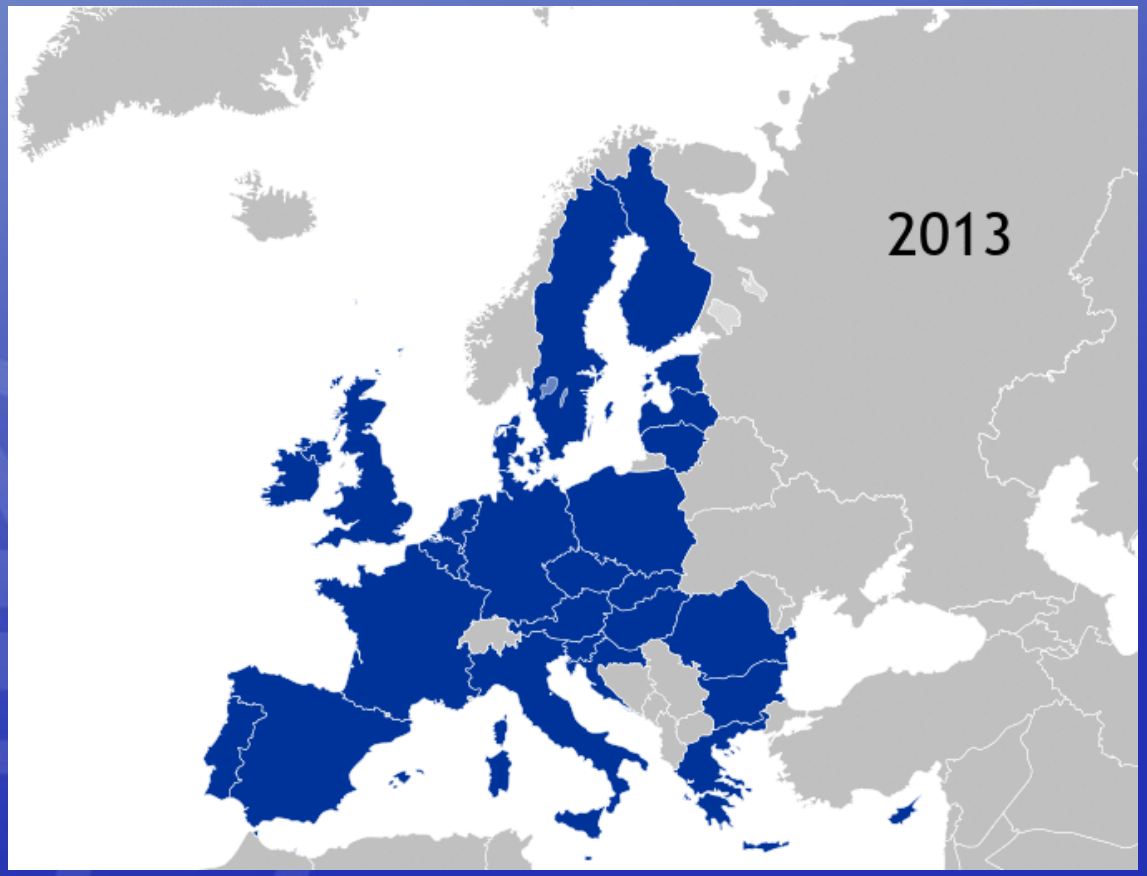
EU



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New Policy Challenges

8 priorities of the Open Science Agenda
of the European Commission

1. Reward system and careers
2. Measuring quality and impact: altmetrics
3. Changing business models for OA publishing
4. FAIR open data (Findable, Accessible, Interoperable, and Re-usable)
5. European Open Science Cloud
6. Research integrity
7. Citizen Science
8. Open education and skills

New Skills for scientists

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Priorities

Services to Divisions

Public Awareness

European Integration

International Cooperation

Advocacy for the physics community

Publication

Next Generation

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Thank you

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