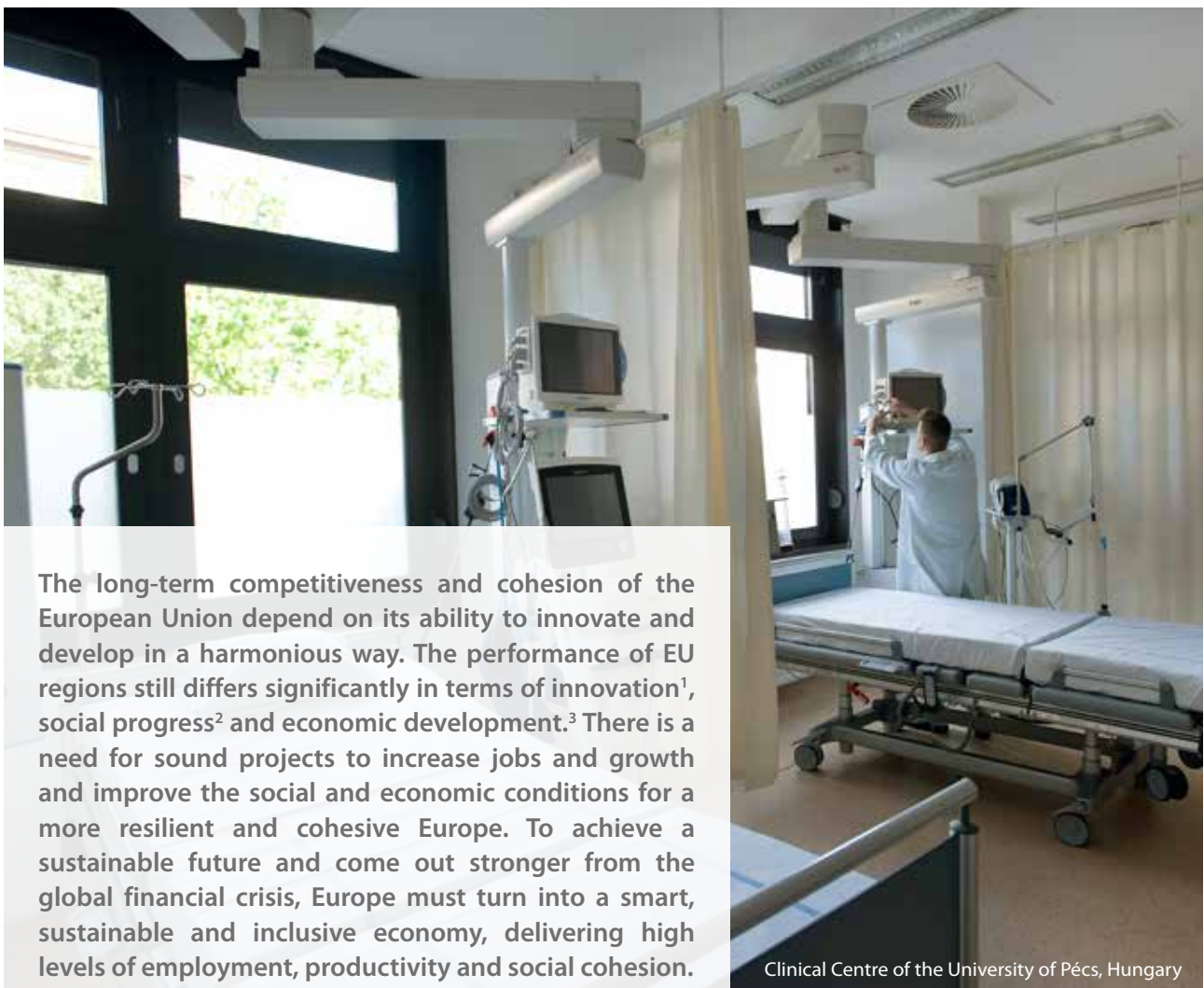


# Smart development for a smart Europe



The long-term competitiveness and cohesion of the European Union depend on its ability to innovate and develop in a harmonious way. The performance of EU regions still differs significantly in terms of innovation<sup>1</sup>, social progress<sup>2</sup> and economic development.<sup>3</sup> There is a need for sound projects to increase jobs and growth and improve the social and economic conditions for a more resilient and cohesive Europe. To achieve a sustainable future and come out stronger from the global financial crisis, Europe must turn into a smart, sustainable and inclusive economy, delivering high levels of employment, productivity and social cohesion.

Clinical Centre of the University of Pécs, Hungary

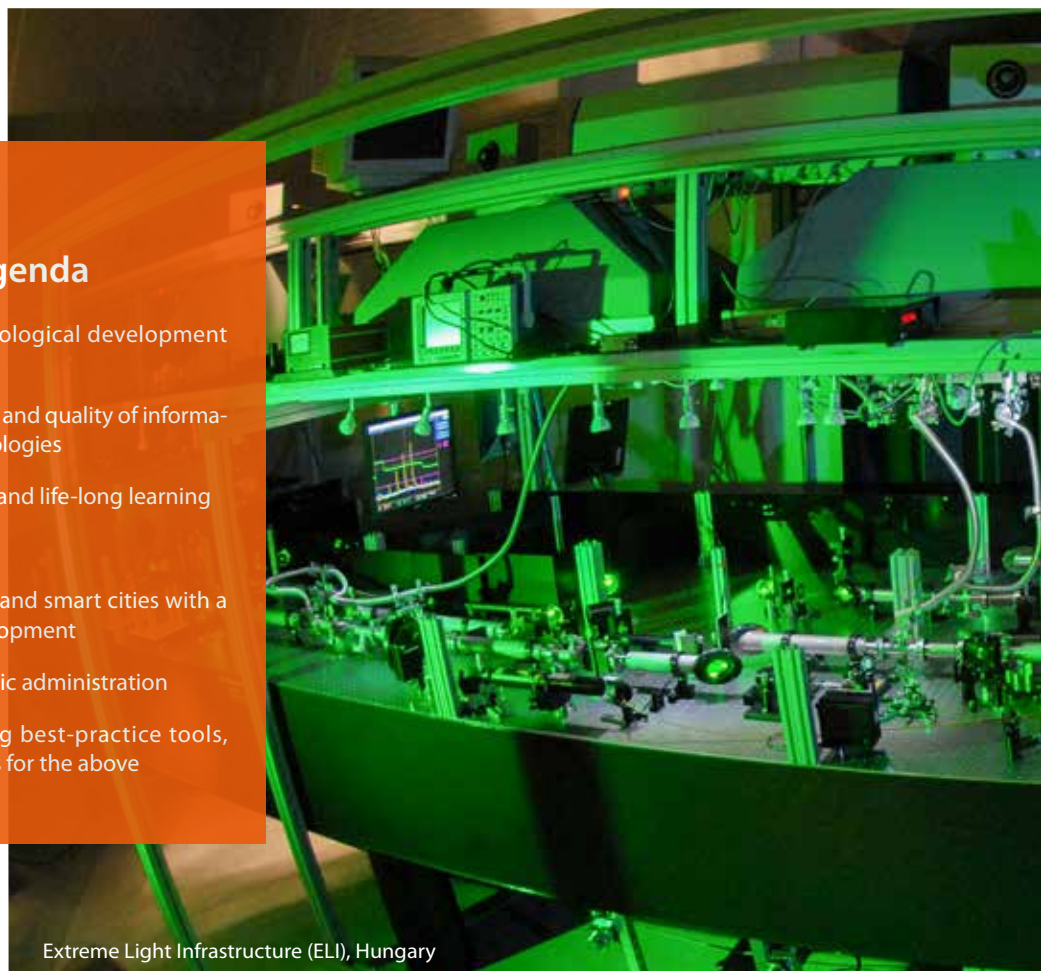
<sup>1</sup> [http://ec.europa.eu/growth/industry/innovation/facts-figures/regional\\_en](http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_en)

<sup>2</sup> [http://ec.europa.eu/regional\\_policy/en/information/maps/social\\_progress](http://ec.europa.eu/regional_policy/en/information/maps/social_progress)

<sup>3</sup> [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/reports/cohesion6/6cr\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion6/6cr_en.pdf)

## JASPERS smart development agenda

- Strengthening research, technological development and innovation
- Enhancing access to and the use and quality of information and communication technologies
- Investing in education, training and life-long learning
- Enhancing healthcare activities
- Promoting smart specialisation and smart cities with a view to sustainable urban development
- Improving the efficiency of public administration
- Developing and implementing best-practice tools, methodologies and case studies for the above



Extreme Light Infrastructure (ELI), Hungary

**JASPERS** (Joint Assistance to Support Projects in European Regions, <http://www.jaspers-europa-info.org/>) aims at improving the quality of investment supported by two European Structural and Investment Funds (ESIF), the European Regional Development Fund (ERDF) and the Cohesion Fund (CF), as well as by funds from the Instrument for Pre-Accession Assistance (IPA). JASPERS offers a wide range of services to EU beneficiary countries and to countries receiving support from IPA<sup>4</sup>:

- Advisory support to the national authorities managing Structural Funds
- Independent quality review (IQR) of projects before they are submitted to the European Commission (EC) for grant funding, and post-submission appraisal (PSA) of projects directly submitted to the EC
- Capacity-building activities through its Networking and Competence Centre

JASPERS' partners are the European Commission, the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). JASPERS is organised into divisions on the basis of sectors and functions, with experts located across regional offices according to their main countries of focus. JASPERS' headquarters are in Luxembourg; other offices are in Brussels, Bucharest, Vienna, Warsaw and Sofia, close to clients and counterparts.

JASPERS advisory support targets major projects with eligible investment costs of at least EUR 50m and non-major projects below this threshold. Assisted non-major projects include: projects close to the threshold of EUR 50m; projects with a high priority in Member States with few or no major projects; and small-scale pilot projects in strategic sectors

with high replication potential (such as smart city projects). In addition, JASPERS assists authorities in the preparation of programmes and urban schemes, which rationalise investments in a number of non-major projects. JASPERS' assistance is provided free of charge and includes:

- Early stage support (i.e. with the review of strategic documents)
- Methodological guidance (i.e. prioritisation criteria for the evaluation of project proposals to be selected as part of an investment programme)
- Project-related technical assistance (i.e. review of terms of reference and project documentation such as feasibility studies, demand analysis, option analysis, financial and economic analysis, environmental impact assessment)
- Support with horizontal issues related to projects (i.e. state aid, cost-benefit analysis and climate change).

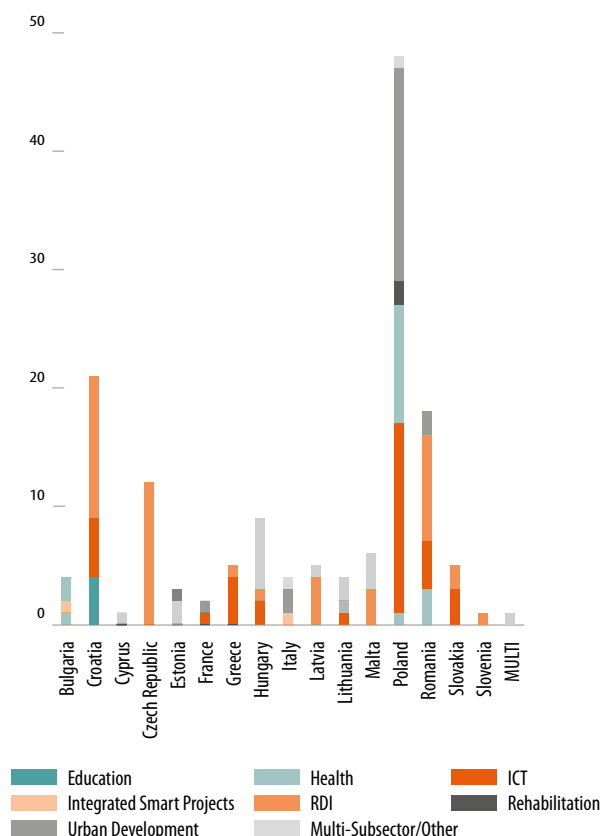
<sup>4</sup> As at 1 December 2016, the EU beneficiaries are Bulgaria, Cyprus, Croatia, Czech Republic, Estonia, France, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and the UK. JASPERS is also active in FYROM, Montenegro, Serbia and Turkey.



## Typical projects assisted by JASPERS in the smart development sector

- Construction/rehabilitation of education and research infrastructure with new technologies
- Development of science and technology parks and open innovation infrastructure
- Extension of broadband coverage in urban and rural areas
- Development of public e-Services projects (e-Health, e-Government, e-Procurement, etc.)
- Preparation of urban development projects with further urban renewal and regeneration potential, including social housing, culture, education and healthcare infrastructure
- Construction, rehabilitation and modernisation of hospital infrastructure; promotion of healthcare research
- Smart city integrated projects contributing to urban innovative ecosystems

Portfolio distribution in the Smart Development Division up to 30.09.2016



Between the start of JASPERS operations in 2006 and 30 September 2016, JASPERS completed 110 assignments in the smart development sector, supporting projects with a total investment cost of about EUR 8bn. In the same period, the European Commission approved 47 JASPERS-assisted smart development major projects, with a total investment cost of EUR 4.2bn. The following table shows the distribution of completed and active assignments as at 30 September 2016:

# Smart development at work: examples of projects assisted by JASPERS

RDI:

## Extreme Light Infrastructure Nuclear Physics (ELI NP), Romania

### The project

- A pan-European project
- Three (potentially four) separate facilities, each focusing on a particular area of laser-related and nuclear physics scientific research in the Czech Republic, Romania and Hungary
- All facilities to be jointly governed by a European Research Infrastructure Consortium (ERIC)

### JASPERS

- Has been providing assistance to the ELI beneficiaries in all the countries concerned and, with regard to ELI NP, in coordination with different European Commission services (DG Regional Policy, DG Competition, DG Research)
- Provided advice on the feasibility and maturity of the project based on a review of the existing project documentation
- Delivered continuous technical assistance during the funding application preparation phase and updating of the project documentation

### Expected benefits

- Opportunities for researchers to test new methodologies
- Research directly applicable to providing solutions used in medicine
- Opportunity for researchers and companies to apply for patents for tested technology



ELI NP is the most advanced research facility in the world focusing on the study of photonuclear physics and its applications



Training teachers how to use ICT equipment in classrooms

Education & ICT:

## e-Schools pilot project, Croatia

### The project

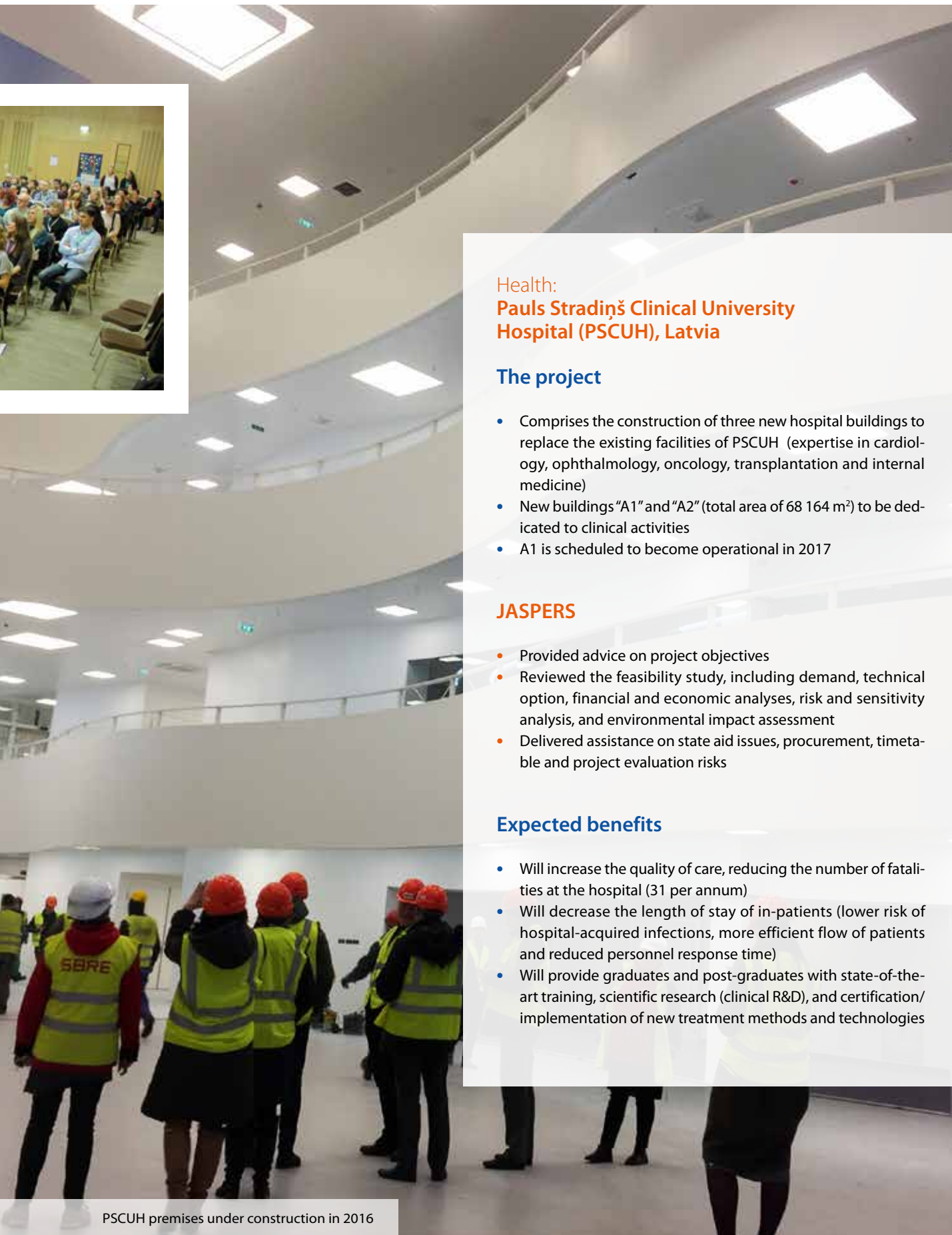
- Will introduce ICT into the Croatian education system
- Is coordinated by the Croatian Academic and Research Network (CARNet)
- Comprises two stages, co-financed by ESIF (combining both ERDF and ESF resources): a pilot project (2015-2018), targeting 10% of all schools in Croatia (140); and a major project (2018-2022), targeting another 700 schools

### JASPERS

- Supported the beneficiary in the preparation of the pilot project
- Provided methodological guidance, including on CBA and state aid aspects
- Reviewed intermediary and final project documents (feasibility study, option analysis, technical scope and cost of the project, institutional setup, review of environmental impact assessment and of the application for funding)

### Expected benefits

- Development of over 6 000 digitally competent students through learning with state-of-the-art ICT equipment in order to better prepare them for the labour market, further education and lifelong learning
- Enabling 1 200 teachers to use ICT equipment in their teaching
- Improvement of the schools' administrative processes involving nearly 7 000 teachers



Health:  
**Pauls Stradiņš Clinical University  
Hospital (PSCUH), Latvia**

### The project

- Comprises the construction of three new hospital buildings to replace the existing facilities of PSCUH (expertise in cardiology, ophthalmology, oncology, transplantation and internal medicine)
- New buildings “A1” and “A2” (total area of 68 164 m<sup>2</sup>) to be dedicated to clinical activities
- A1 is scheduled to become operational in 2017

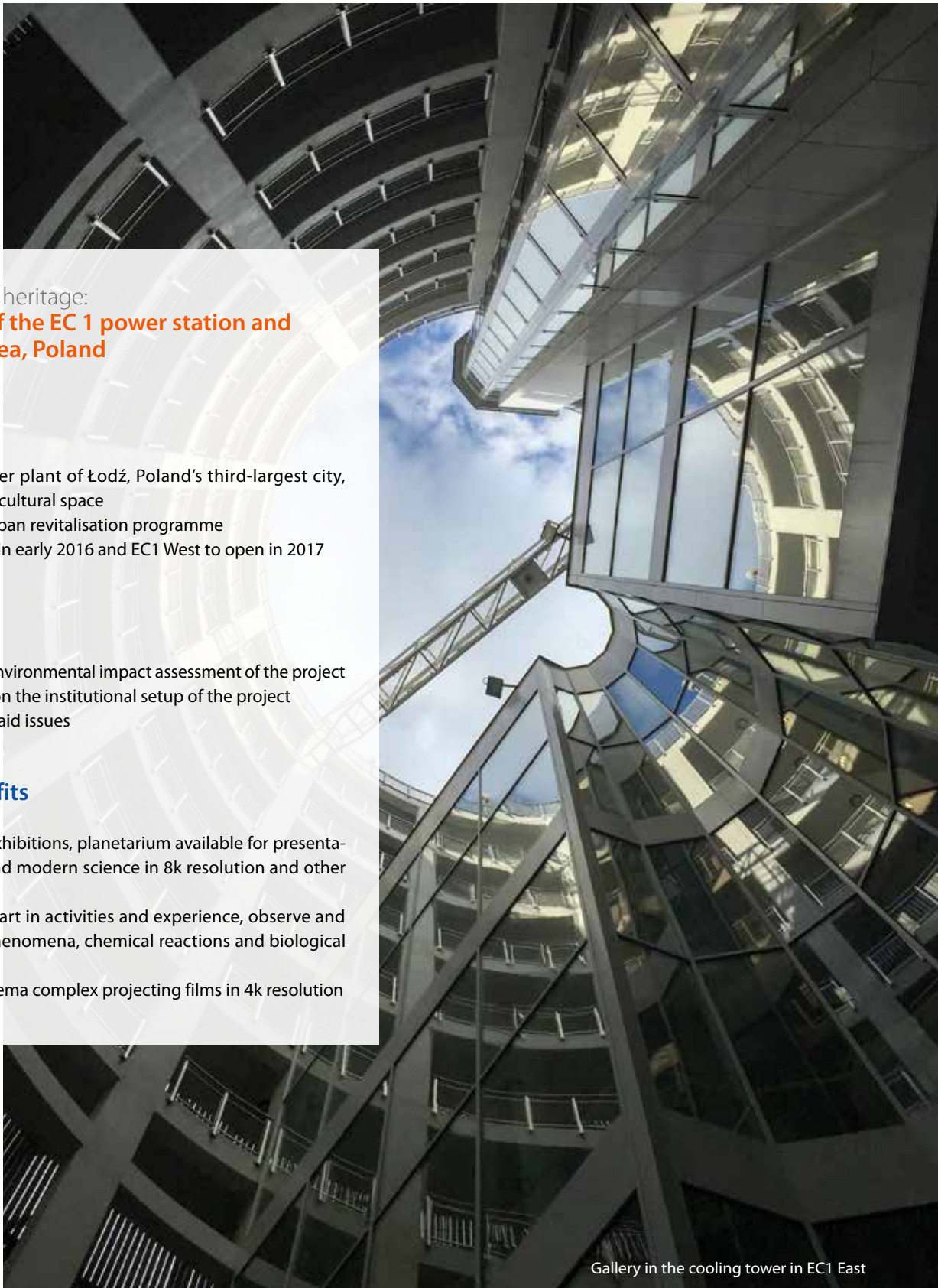
### JASPERS

- Provided advice on project objectives
- Reviewed the feasibility study, including demand, technical option, financial and economic analyses, risk and sensitivity analysis, and environmental impact assessment
- Delivered assistance on state aid issues, procurement, timetable and project evaluation risks

### Expected benefits

- Will increase the quality of care, reducing the number of fatalities at the hospital (31 per annum)
- Will decrease the length of stay of in-patients (lower risk of hospital-acquired infections, more efficient flow of patients and reduced personnel response time)
- Will provide graduates and post-graduates with state-of-the-art training, scientific research (clinical R&D), and certification/implementation of new treatment methods and technologies

PSCUH premises under construction in 2016



Urban & cultural heritage:  
**revitalisation of the EC 1 power station and surrounding area, Poland**

### The project

- Former EC1 power plant of Łódź, Poland's third-largest city, transformed into cultural space
- Part of a larger urban revitalisation programme
- EC1 East opened in early 2016 and EC1 West to open in 2017

### JASPERS

- Took part in the environmental impact assessment of the project
- Provided advice on the institutional setup of the project
- Assisted on state aid issues

### Expected benefits

- Workshops, art exhibitions, planetarium available for presentations on space and modern science in 8k resolution and other selected exhibits
- Public can take part in activities and experience, observe and study physical phenomena, chemical reactions and biological structures
- 3D Omnimax Cinema complex projecting films in 4k resolution

Gallery in the cooling tower in EC1 East

# Capacity building and knowledge sharing

JASPERS provides a range of capacity-building services, both during project preparation assignments and through the Networking and Competence Centre (NCC) and its dedicated Networking Platform.

The Networking Platform complements advisory operations by implementing capacity-building and knowledge-sharing activities, as well as fostering dissemination of good practices and an exchange of experience among all JASPERS stakeholders. Such initiatives actively involve stakeholders from different EU regions and countries in addressing subjects of mutual interest, increasing their administrative capacity and promoting peer-to-peer learning. Conferences, workshops, seminars, roundtables and dedicated training programmes are open free of charge to relevant authorities and beneficiaries from all EU Member States and pre-accession countries.

These activities focus on key policy requirements, horizontal matters and issues affecting the sound preparation and timely implementation of projects financed by ESIF. Support is also provided to counterparties for preparing and implementing their own administrative capacity development and training programmes, including train-the-trainers modules and support for institutional development, in close partnership with the requesting authorities.

More than 1 300 experts and officials have attended Networking Platform capacity-building activities since the start of its operations in 2013, largely from Member States' authorities, as well as JASPERS partners and other Commission services. Training materials, proceedings, videos and other e-learning tools are disseminated through a dedicated web portal ([www.jaspersnetwork.org](http://www.jaspersnetwork.org)), on which information on activities, working papers and studies developed by JASPERS is also available.

NCC also provides advisory support and specialist advice on cross-sectoral issues, such as state aid, climate change, environmental considerations and cost-benefit analysis, as well as PPPs and blending. NCC implements on-demand capacity-building assignments in the countries where JASPERS operates, to address specific issues at the local level, based on requests received from the relevant managing authorities.

Activities of the Networking Platform and in-country capacity-building assignments aim at transferring the practical know-how required for the sound preparation and appraisal of major and non-major ESIF projects to the relevant authorities. The objective is to support Member States in increasing their administrative capacity, and thus becoming gradually more autonomous in project preparation.



## Smart development for a smart Europe

### Some capacity-building examples

May 2016

#### Cost-benefit analysis forum on Research, Development and Innovation (RDI) Infrastructure

- Regular CBA forums are organised by DG REGIO and JASPERS under the Networking Platform
- A dedicated meeting focused on the methodology to be applied for RDI infrastructure
- JASPERS presented a working paper providing guidance on the calculation of economic benefits for RDI projects, as well as on risk assessment and climate change considerations

(<http://www.jaspersnetwork.org/display/EVE/Cost-benefit+Analysis+Forum+meeting+on+RDI+infrastructures>)

May 2015

#### Workshop “ELI pillars – status and way forward”

- This workshop brought together the main stakeholders from the three ELI-pillar countries to assess the status of the pan-European ELI project
- It provided the opportunity for the different national authorities to share experience on various topics related to the monitoring and institutional approach to the projects
- It facilitated discussions on the roadmap for the ELI ERIC, including strategies for common open access policies, technology transfer and organisational activities

(<http://www.jaspersnetwork.org/pages/viewpage.action?pageId=19464456>)



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