



Science Gateway

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Outline

 Project

 Administrative procedures

 Procurement process

 Funding

 Schedule

 Impact



A new hub for education, training and outreach, located in the area next to the Globe of Science and Innovation, across the road from the current Reception Building. The Science Gateway will be an integral part of the CERN site and stand alongside the visit circuit to the research facilities. Activities will target the general public of all ages from 5 years up.

Vision and goals (I)

CERN attracts every year more visitors (136 000 in 2017) (> 60% are high-school students) from across the world (but over 300 000 requests!). All our education/training activities are over-subscribed.

→ A clear sign of the great interest in science and technology and the key role that CERN plays in inspiring the younger generations especially.

As a world-leading research laboratory CERN is an ideal location for a dedicated scientific learning and outreach centre open to the general public, complementing its unique research facilities that attracts thousands of people every year.



The Science Gateway will allow us to:

- ❑ expand and diversify CERN's portfolio of education, communication and outreach actions aimed at the general public.
- ❑ satisfy the > 300 000 visit requests received every year
- ❑ cover all ages (~5 to 105+ years!) with targeted initiatives (currently minimum age for education activities on site: 16 years)
- ❑ engage more with the local population (schools, authorities, etc.) and other initiatives in particular in CERN's Member and Associate Member States.

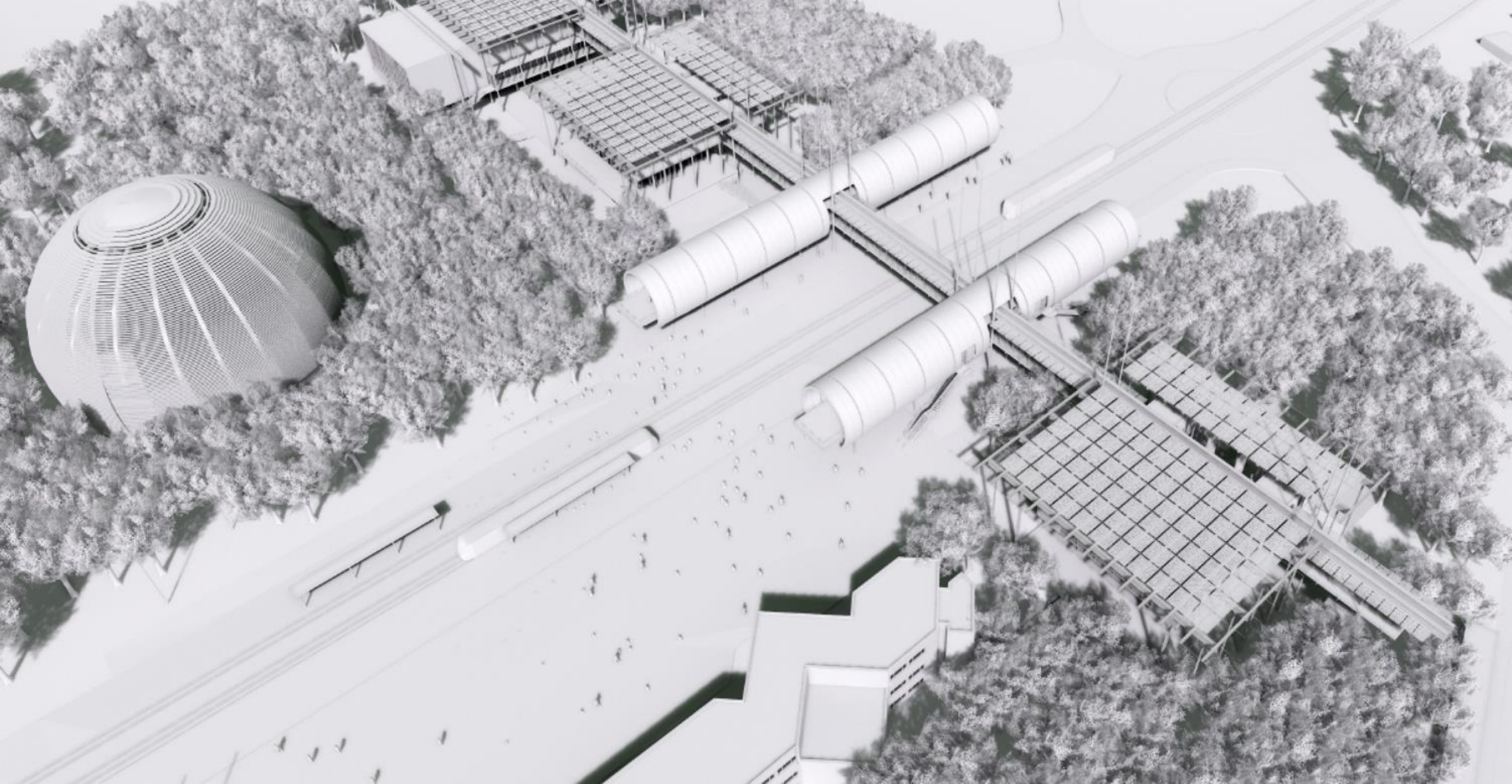
Vision and goals (II)

Science Gateway will highlight the crucial role that science can play in:

- ❑ pushing back the frontiers of human knowledge (the importance of fundamental research)
- ❑ driving technology and innovation → societal benefits and impact on people's everyday lives
- ❑ promoting peaceful collaboration between the peoples of the world

It will be a **source of inspiration** for the general public, help nurture passion for scientific knowledge, and encourage young people to embark upon careers in Science, Technology, Engineering and Mathematics (STEM). Note: <20% in Europe today.

It will be realised in close collaboration with research and learning institutions in the region, notably Geneva University and EPFL; links will be forged also with other institutions, learning centres and science museums, in particular in the CERN Member States.











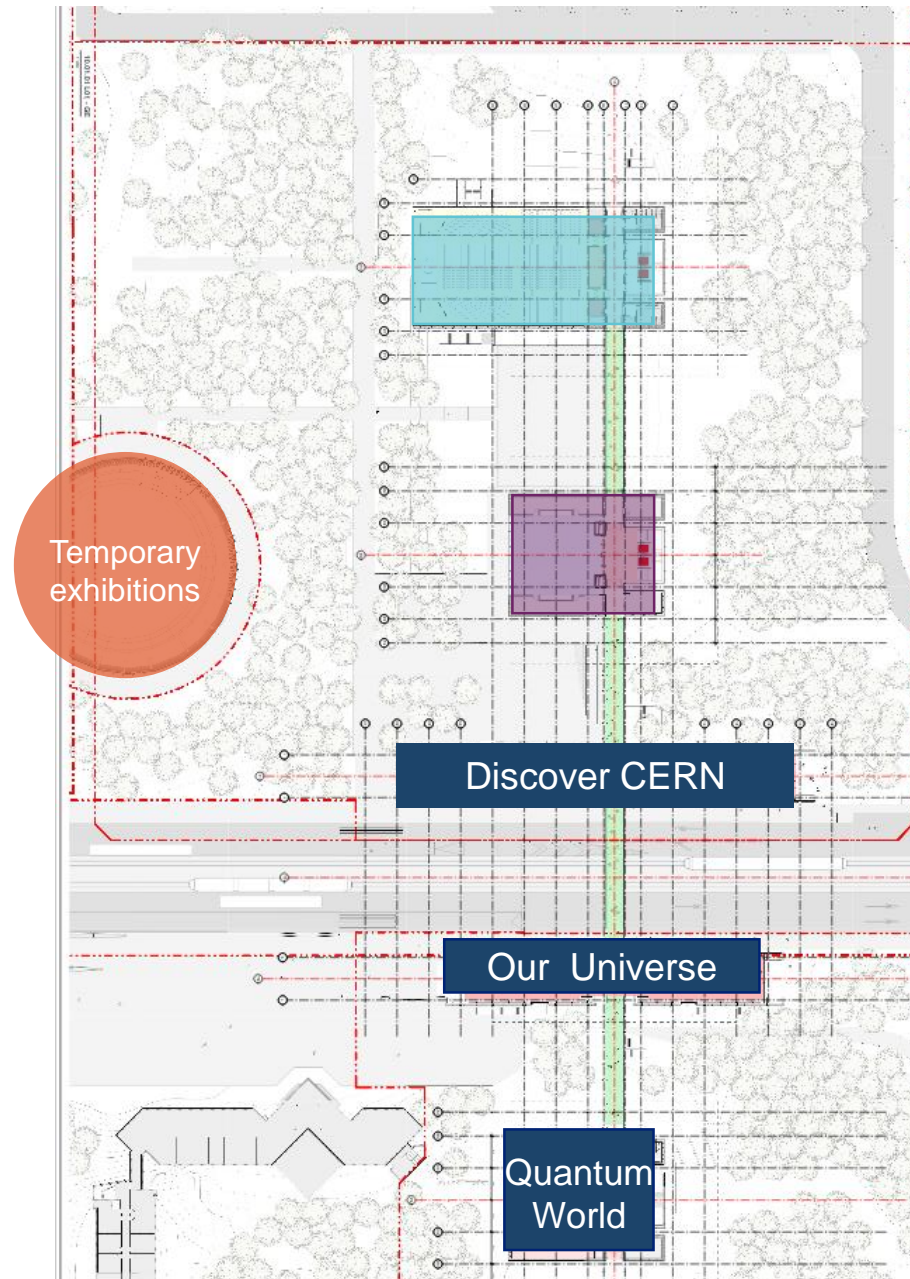
Exhibitions

The Globe

Start of guided tours
Temporary exhibitions

We will tell authentic stories through:

- Scenography (immersive, realistic, inspiring)
- Real CERN objects
- Hands-on exhibits
- Multimedia
- Film
- Art (in collaboration with Arts at CERN)



Auditorium

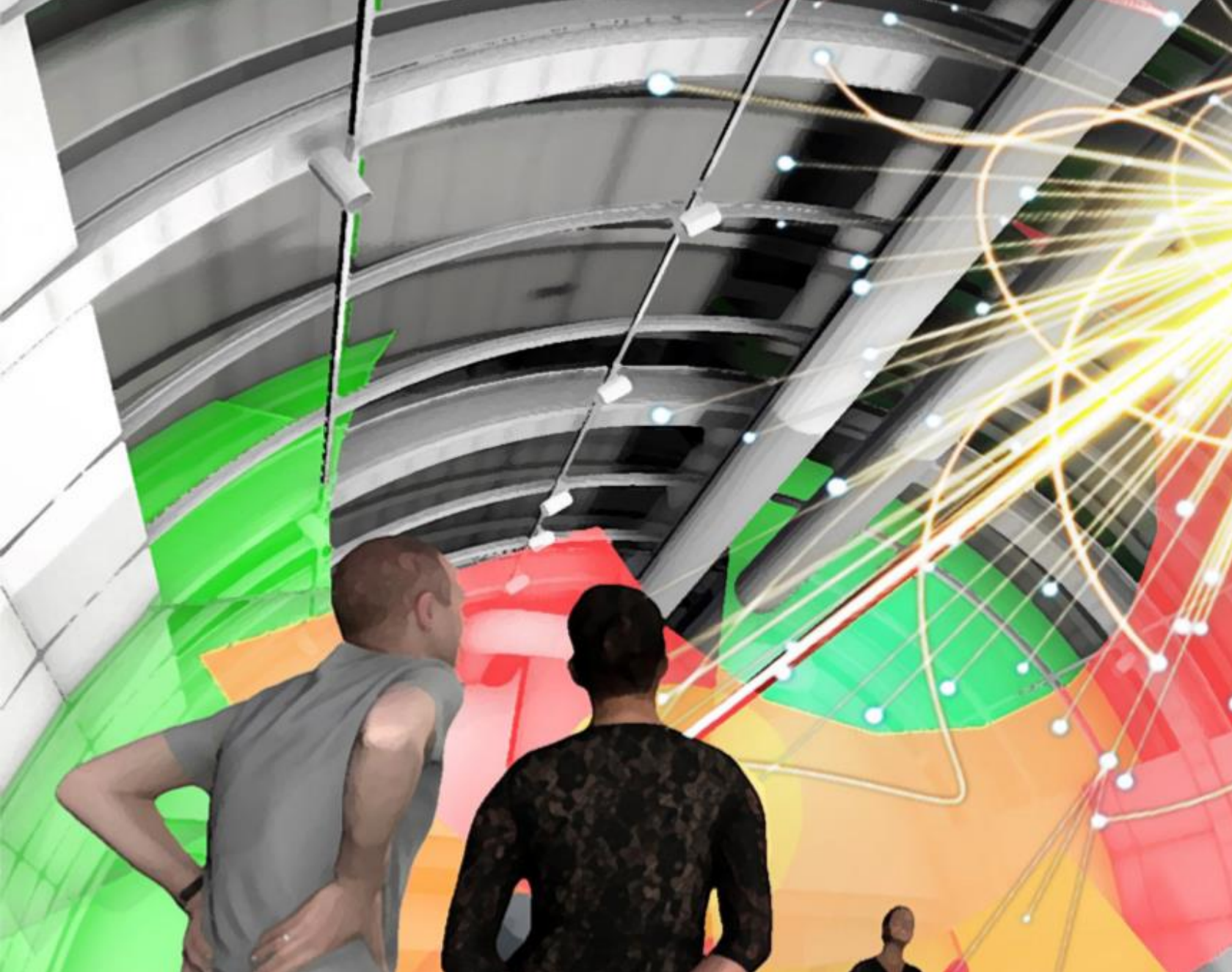
Science shows
Conferences
Debates
Lecture-demonstrations

Labs

Enquiry based learning
Hands-on experimentation

Permanent Exhibitions

Discover CERN
Our Universe
Quantum world



Scenography aims to:

- Make visitors feel they are at CERN (*Discover CERN*)
- Create a contemplative space for visitors (*Our Universe – Back to the Big Bang*)
- Create an immersive and interactive guided experience (*Quantum World*)

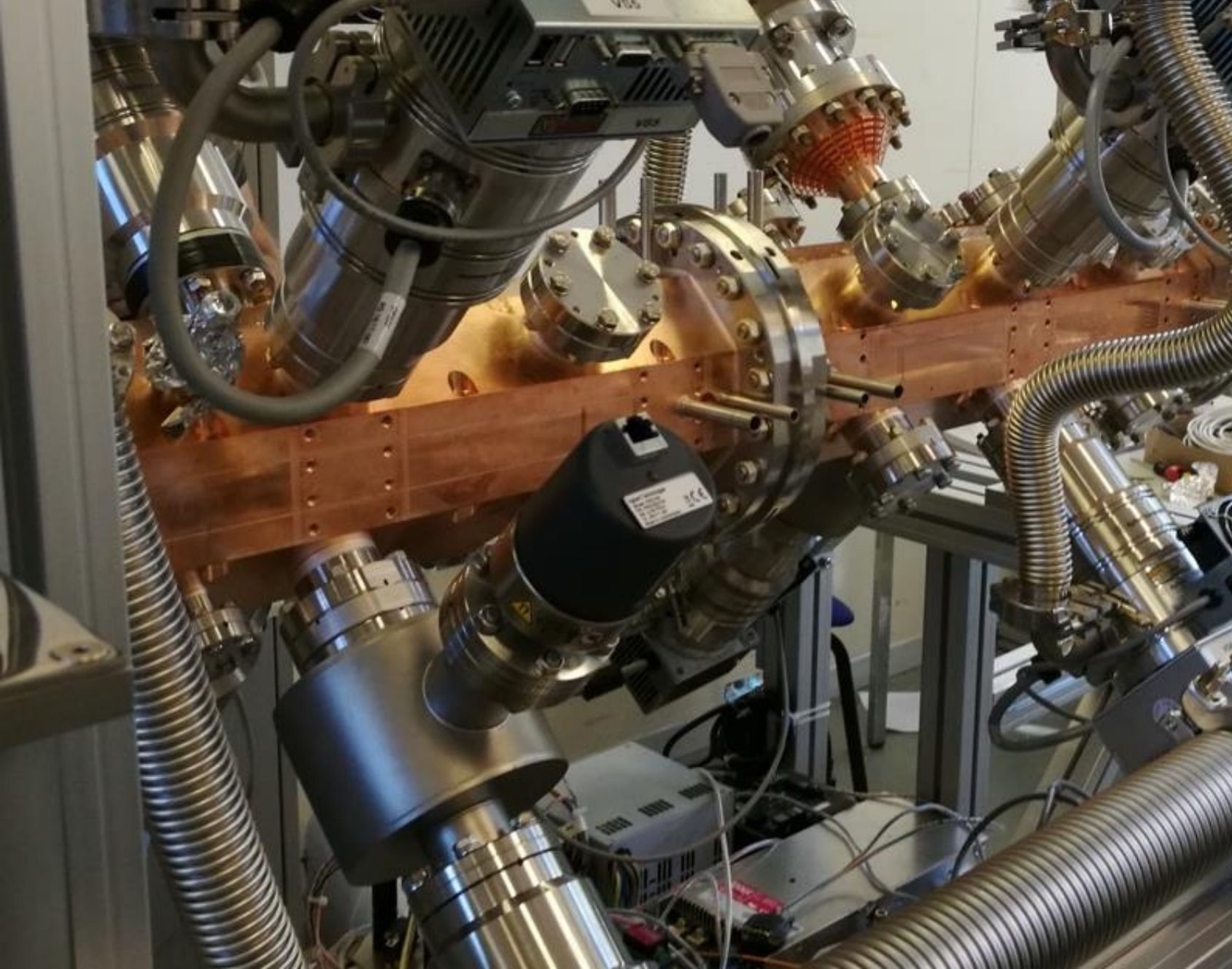
Elements will be simple, will not clutter the spaces, will be designed to focus on the authentic content



Authenticity through real objects

In *Discover CERN*

- The spectacular piece of LINAC2 - the first accelerator in the chain



Authenticity through real objects

In *Discover CERN*

A real proton accelerator that both scientists and visitors will use on the exhibition floor

- Link to use of accelerators in medicine and cultural heritage (for example)

The Labs

the physical space

Size 250 sqm + 2*50 sqm storage and preparation

Flexible division into two labs

Light on scenography to foster students' focus on activities

- Scenographic elements will connect with those in Discover CERN

Modular space, a possible layout

- Introduction & discussion areas with interactive smartboards
“auditorium meets lounge”
- Furniture adapted to age groups as well as the different activities
“makerspace meets modern lab”



The Labs content

Kick-off Workshop



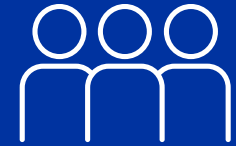
When?

29th – 31st
January 2020



What?

Identify content structure,
possible activities and collaborations



Who?

Experts in science,
education and outreach.
46 participants, from **17 countries**

Science shows

Kick-off Workshop



When?

Spring 2021



What?

Development of science shows
(balance narrative and experiments)
Integration in the visitor experience



Who?

Experts in
developing science shows

Administrative procedures: all completed

Land

Globe temporary parking
was on agricultural land

Concession for the bridge

right to be on public domain

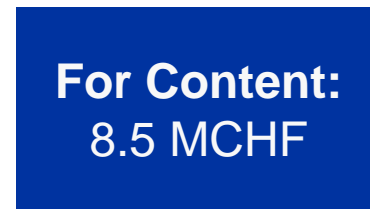
Building permit

Procurement process

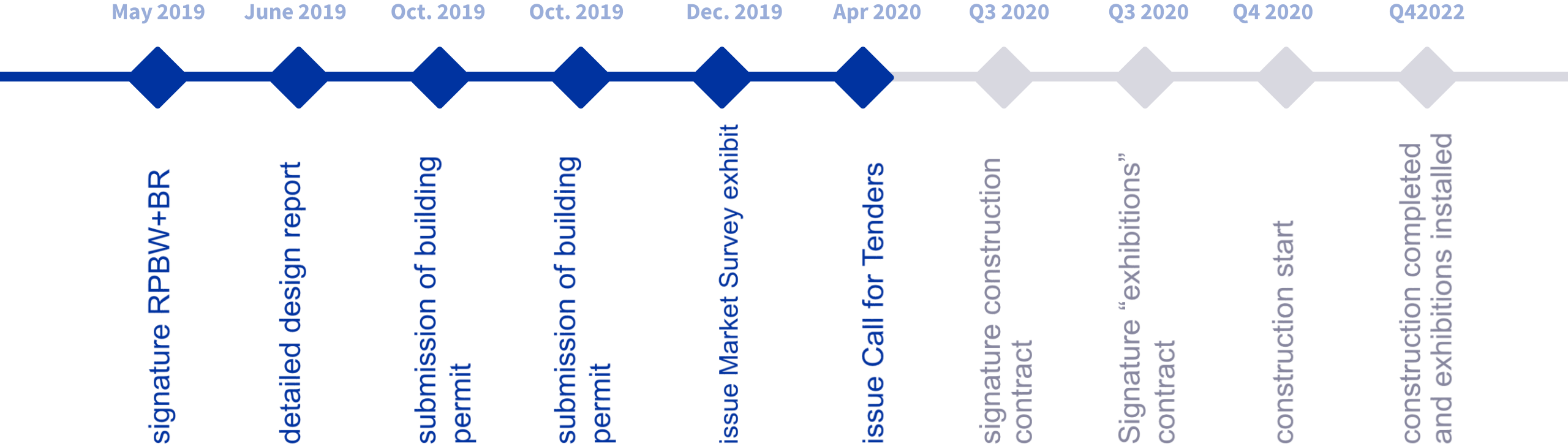


Secured funding

Total. 67 MCHF



Overall schedule



Impact

- **During construction:**
 - **Construction cost (73 MCHF)**
 - **Development of exhibitions and content (14 MCHF)**
- **During operations:**
 - **Between 300 000 and 500 000 visitors per year (currently 135 000 of which 80% live > 700 km away)**
 - **Develop « tour » with other International organisations**
 - **Schools**
 - **Events**
 - **Network with universities and science centres**

Impact



INDUSTRY



EDUCATION



CULTURE



TOURISM



REPUTATION



**PROMOTE
FUNDAMENTAL
RESEARCH**



**PROMOTE
SUSTAINABLE
DEVELOPMENT**

Interplay with new infrastructure

The Science Gateway project has strengthened :

- **our relations with the Canton and « France voisine »**
- **our links with the university of Geneva and other institutions**
- **the awareness of decision makers, media and general public on CERN's mission**

- **This will be important for the acceptance and approval of new infrastructure projects in the region**



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