

## NOAA SCIENCE ON A SPHERE

EXPLORE THE PLANET LIKE NEVER BEFORE

## AN INTERACTIVE AND FUN WAY TO LEARN

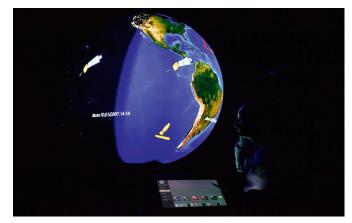
The NOAA Science on a Sphere® installation helps you understand natural phenomena like meteorology, climate, geography and oceanography within a broader context

- Content based on real scientific data
- Planetary data visualizations
- One-of-a-kind visual experience
- Innovative presentation of measured phenomena across the globe

Science on a Sphere® installations can be found in educational institutions, museums, planetariums and public centres around the world.











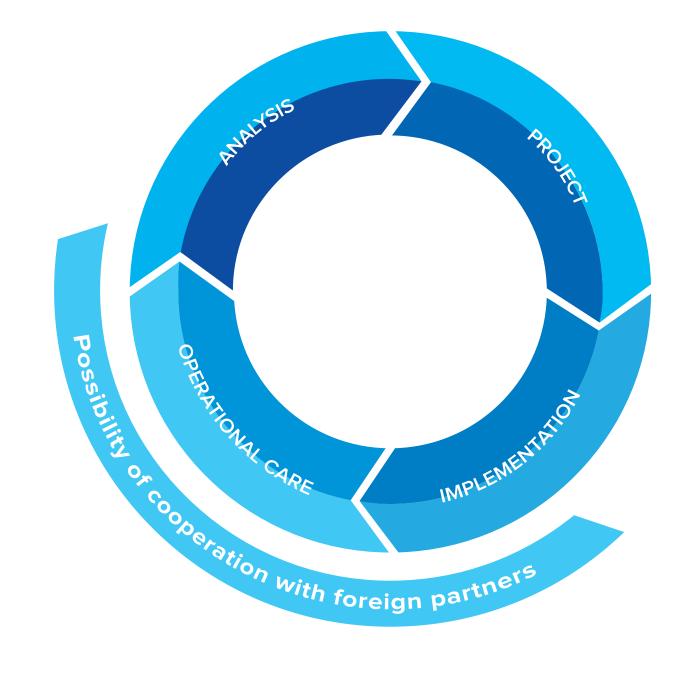


- Science real-time data
- Global data visualizations
- Cosmic events
- Climate change
- 3D without glasses
- Immersive experience





### HOLISTIC APPROACH TO SOLUTION IMPLEMENTATION

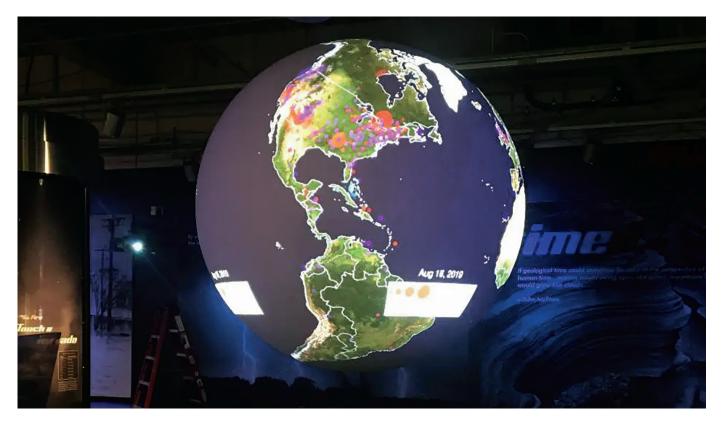


## ANALYSIS Defines user goals and expectations

National Oceanic and Atmospheric Administration (NOAA) scientists developed Science on a Sphere® as an educational tool to help introduce Earth science to people of all age groups. Complex environmental processes are explained in an intuitive and fascinating way.

The analysis defines the goals, user expectations, possible scenarios for effective involvement of the audience in the discovery process, as well as recommends optimal approaches for different target audience groups. At the same time, it works with the entire space and suggests optimal placement within the space to maximize the impact on the viewers. Science on a Sphere® extends the goals of NOAA's education programme, which aims to increase general public awareness of the environment. It promotes a better understanding of climate change through illustrative animations that show the causes and consequences. It allows near-real-time monitoring of atmospheric and oceanic currents, sea transport, air traffic and the spread of tsunami as a result of earthquakes.

The NOAA's collective knowledge of the Earth - land, oceans and atmosphere - presented through the NOAA Science on a Sphere® project, contributes to the improvement of the informal education programmes of educational centres, primary and secondary schools, universities and museums around the world.



### PROJECT PLAN The basis for successful implementation

#### Detailed project plan

Project documentation plays an indispensable role in the course of any complex solution. In order to deliver a fully functional audiovisual system, this applies here, too. It serves as a basis for the competent implementation of the project and clearly defines the scope, functionality, links to other professions, the necessary construction readiness and the expected volume of investment costs. It therefore provides the investor with a comprehensive idea of the required audiovisual equipment before the implementation of the investment commences, guiding them in the given issue and making it easier to decide on the required technical and economic optimum. AV technology is a separate field and does not fall under any part of the construction. It should be treated separately. It ensures for the investor that the ideas defined in the study will materialise.



#### Definition of user requirements

We conduct all the initial consultations focused on the accurate specification of the project and the determination of its scope project. We navigate the user through the problematics of the audiovisual systems and work with them to precisely formulate their initial requirements.

#### Professional approach to the solution

We follow the latest development trends in the field of audiovisual and interactive technologies. The project outcome is always a system specification that meets current industry demands and reflects the user's operational requirements as closely as possible.

#### Cost optimisation

Part of the plan includes the preparation of a comprehensive equipment list with model and price recommendations. We provide the investor with a clear idea of the financial requirements for the future implementation, while creating room for setting the technical standards for the end elements in order to fine-tune the investment plan.

#### Coordination of activities

The design work also includes the coordination of the activities of the architect and the building professions. The timely harmonisation of these can significantly save time and money during the implementation process.

#### Definition of responsibilities

We guarantee the trouble-free functionality and mutual compatibility of all parts of the project system. As a result, the project becomes a competent basis for the smooth implementation of the entire works.

### PROJECT IMPLEMENTATION Delivers emotions and experiences!

The Science on a Sphere<sup>®</sup> installation aims to provide the general public and schools with an interactive and fun way to learn about global phenomena, including meteorology, climate, geography, oceanography and much more.

The content presented on the sphere includes real data, simulations and visualizations that allow visitors to better understand these global phenomena.

Science on a Sphere<sup>®</sup> allows visitors to become involved in the educational process, helping them better absorb information through a tangible and visual experience.









### OPERATIONAL CARE

#### We have you and your visitors in mind

Have you really thought of everything? We recommend entrusting a professional company to conduct maintenance of the entire system at least once a year. This includes:

- Routine maintenance (cleaning, visual inspection)
- Checking the wear and tear of consumables, such as lamps
- Loudness adjustment
- Interactive display calibration check
- Functional test of the entire system
- Minor repairs (connection points, cables)
- Report on the results of the tests undertaken and recommendations for corrective actions

The required frequency of professional maintenance depends on the demands placed on the reliability of the equipment, the behaviour of the users and the consistency of maintenance.

AV MEDIA provides a comprehensive range of services

- Remote administration
- Failure prevention
- Prophylaxis
- AV assistance
- Preventive maintenance

A service contract guarantees maintenance at regular intervals, which we will oversee on your behalf. You can quickly and transparently calculate the cost of equipment maintenance, prevent failures, avoid surcharges for emergency call-outs, prolong the life of your equipment and provide peace of mind to the personnel responsible for operating the equipment. Please contact our sales representative for a proposal regarding suitable service terms.

### If something goes wrong despite our best efforts, there is a short fault reporting form available at http://www.avmedia. cz/servis.

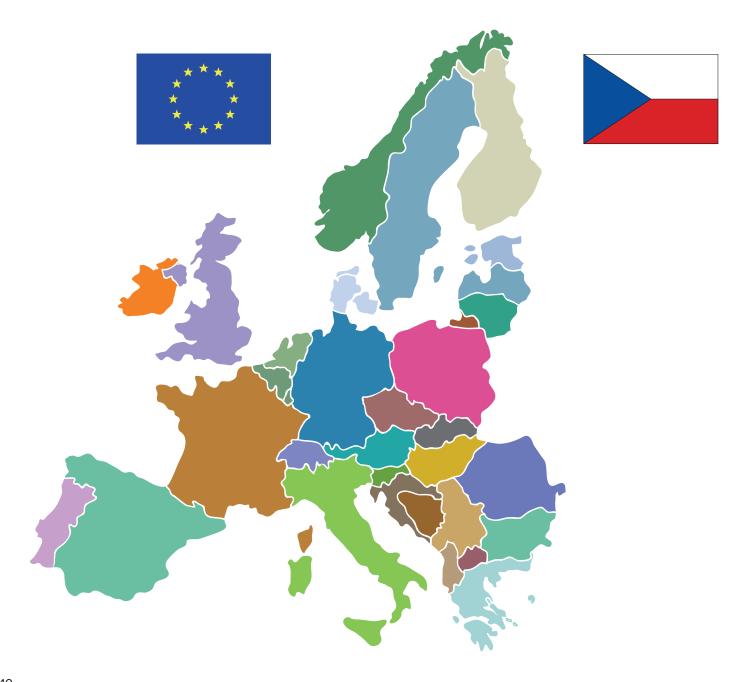




### INNOVATION IN THE EDUCATION AND POPULARISATION OF SCIENCE



### MORE THAN 200 INSTALLATIONS WORLDWIDE



## TECHMANIA SCIENCE CENTER IN PILSEN Experimental science centre for curious visitors

The Science on a Sphere<sup>®</sup> installation is an interactive exhibition that is interesting for visitors not only in terms of the technology used and the wow effect, but above all in terms of its contents. The results of the measurement of various phenomena around the globe, and their presentation on a spherical projection screen showing the Earth, which can be walked around, explored, viewed and controlled in a natural way, is truly unique. As a result, these spherical cinemas have found applications worldwide.



## ALTERNÁTOR ECOTECHNICAL CENTRE IN TŘEBÍČ Second Science on a Sphere® in the Czech Republic

The environmental and technical centre in Borovina was established as a project inspired by modern interactive science centres that seek to educate visitors in physics, technology and ecology in a fun way.

The aim of the recently opened Alternátor Ecotechnical Centre is to introduce visitors of all ages to the possibilities of using different energy sources. The exhibition traces man's journey to obtain heat and electricity, from ancient history to the present day and the very latest technologies. The new interactive exhibition was created in a former boiler room. The installation of Science on a Sphere® formed part of the project, thereby becoming the seventh in Europe.

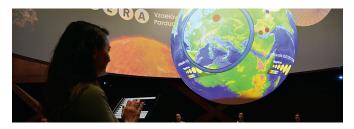




## SFÉRA EDUCATIONAL CENTRE IN PARDUBICE A space for creativity and discovery

The educational centre was established to support the education of both primary and secondary school children, as well as adults, and to provide leisure activities. It is transforming established ways of learning and discovery, and is having an impact on people living in the region and beyond. The centre provides specialist classrooms for biology, chemistry, physics, robotics and computer graphics, as well as workshops, the Children's World room, and a multi-purpose presentation room that is home to a Science on a Sphere® installation.



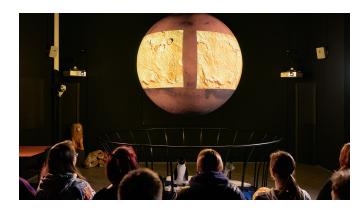




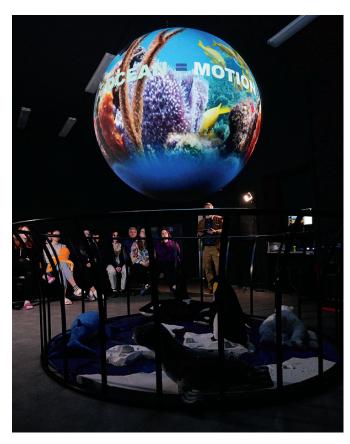
## ŽATEC SCIENCE CENTRE Experience the Earth and the Universe like never before

The attractive exhibition is not only visually interesting, but above all packed with new information. The image based on NOAA measurements is projected onto a spherical screen with a diameter of almost two metres. The sphere can be walked around to naturally observe situations happening in different parts of the planet. The surface of the sphere can present, among other things, the earth's atmosphere, oceans or simulations of various events, but also the surface of the Moon, Mars and other planets. In addition to planetary and cosmic phenomena, the sphere can also be used to watch a variety of educational programmes, live presentations or lectures by leading scientists and experts.









# KRÁSNÁ LÍPA PRIMARY SCHOOL Non-traditional way of teaching

The brand new science classroom at the Krásná Lípa Primary School became the fifth Science on a Sphere® installation in the Czech Republic. The sphere is not only used by teachers to project events on the Earth's surface, based on NOAA data, but also to present physics, science, geography and history lessons to pupils.

Because the classroom was designed as a multifunctional space, a special hoist was installed to enable the sphere to be manoeuvred.









We are the largest Czech integrator of audiovisual technologies. In us, you will find a strong partner with a long history and excellent market reputation. We deliver superior comprehensive services across all market segments. Our service portfolio includes the sale and rental of presentation equipment, audiovisual system integration and other services that we provide at the highest technical level.



The mission of NOAA, which collaborates with its partners all around the world in monitoring global weather and climate, is to better understand the world of nature and protect its precious resources across national boundaries.



