



cityscope



Dresden Neumarkt, July 12th, 2005

DPS-6MX Panoramacamera

A warm welcome to the Online Panorama, *cityscope's* visual documentation system for construction projects, urban development, public events and much more. Automatically generated panoramic images form the basis for various online presentations and offer a wide range of state-of-the-art documentation possibilities.

The following highlights stemming from the past ten years will take you on a journey through space and time and show magnificent panoramic views and high quality building-site documentations. We will additionally point out various ways in which you can make efficient use of our product.

The cityscope Architecture Documentation

Our cityscapes and landscapes are subject to permanent change: architectural visions turn into reality and shape our environment.

The public is keenly observing this process and expects clear and comprehensive information at all times. Investors, city developers and governments are also interested in utilizing new communication tools for marketing purposes and image building.

The *cityscope Online Panorama* is a communication medium which is especially geared towards visualizing construction projects and urban development.

Space and Time

In a unique way, the *Online Panorama* combines a project's spatial setting with the progress it makes over time. The panoramic image is a perfect medium for depicting the evolving architecture in its urban environment. Employing an angle of vision of up to 360 degrees, it presents an authentic view that corresponds with the human field of vision.

The pictures taken at regular intervals establish a long-term digital archive, which depicts the temporal dimension of a construction project and can be called up interactively at any time.

Online Documentation System

The camera system installed at the construction site automatically records panoramic images of the emerging structure and its spatial environment. In addition, single shots can be taken from any perspective and at freely chosen time intervals.

Internet Presentation

The pictures taken by the camera are transferred to the Internet server, where they are stored and made available to the worldwide public. The Timeline software, developed by cityscope, makes it possible to view the space- and time-related presentation of a construction project on the Internet.

The Archive

In addition to the immediately retrievable Internet version, the images are also stored in high resolution, thus establishing a high-quality stock of images. The archive system can be used in various ways to retroactively document a construction project, since the available image formats can be used in different media, i.e. time-lapse movies, CD-ROM and print.

Information Terminals

Point of information terminals offer excellent presentation possibilities at exhibitions and fairs, inviting visitors to travel through the space and time of a construction site. This tool allows interested persons to browse through the space and time of a project on their own.

The screenshot displays the cityscope web application interface. At the top, a browser window shows the URL <http://panorama.dresden.de>. The main content area features a panoramic view of Dresden Neumarkt, with construction cranes visible against a blue sky. Above the panorama, a timeline interface allows users to navigate through dates from 2005 to 2006. Below the panorama, there are labels for different areas: Schloss, Jüdenhof, Quartier I, Frauenkirche, Quartier III, and Quartier IV. A caption box at the bottom provides information about the Dresden Neumarkt project, mentioning its reconstruction and the use of cityscope's technology. On the right side, there are buttons for 'Detail', 'Panorama', and 'Zeitraffer'. The interface is annotated with orange lines pointing to various components: 'Archive Retrieval' points to the timeline, 'Media Window' points to the panorama, 'Caption' points to the bottom text box, and 'Project Info' points to the bottom right area.

Willkommen bei cityscope

Adresse <http://panorama.dresden.de> Wechselt zu

Bauprojekt Dresden Neumarkt 11.01.2006 - 12 Uhr www.cityscope.de

2005 2006

Jan Feb Mar Apr Mai Jun Jul Aug Sep Okt Nov Dez

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Detail Panorama Zeitraffer

Schloss Jüdenhof Quartier I Frauenkirche Quartier III Quartier IV

Dresden Neumarkt Der Dresdener Neumarkt, seit Mitte des 18. Jahrhunderts weltbekanntes Antlitz der Elbmetropole, wird derzeit rekonstruiert: Zwischen Jüdenhof und der wiederhergestellten Frauenkirche entsteht in fünf Bauabschnitten die

cityscope dokumentiert die Entwicklung seit Juli 2005 mit einem 180° - Panoramablick auf den Neumarkt: Zum Einsatz kommt cityscope's neueste Entwicklung, das High Resolution Multimodul Panoramasytem.

On the Web - a Journey through Space and Time

The starting point is the current panoramic view of the location. Spectators are free to choose their individual vantage points within the panoramic sphere. By calling up single images from the archive using the interactive Timeline interface, users can retrace the course of events all

the way back to the beginning. Explanatory texts and links to the shown objects are accessible at different levels - via captions, roll-over text, or in the information window.



Three monitor presentation with space and time wheel

Panorama -Time Journey

The *cityscope* terminal connects the current view of the construction site with the possibility of interactively retrieving images from the archive.

Two wheels for time and date allow the visitor to navigate freely within the documented period. The Timeline embedded in the image enables orientation within the chronology of the archive.

The *cityscope* terminal invites the visitor to intuitively travel through space and time of a building project.



城市全景

Shanghai Panorama



Pudong panoramic image

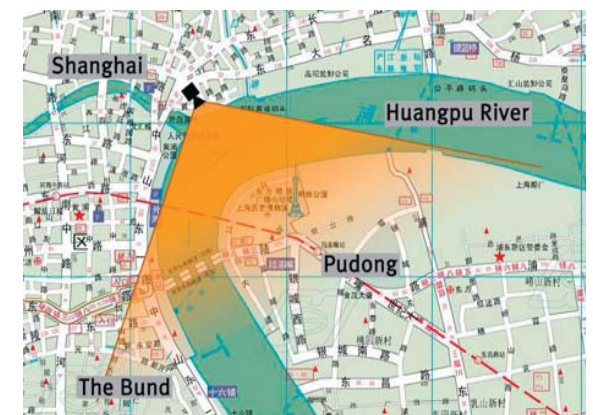
Boomtown View

Pudong has recently changed from an unimportant district of the Chinese metropolis of Shanghai to a vibrant waterfront district. In only 15 years, this part of the city has undergone major changes. Rice fields have been replaced by magnificent futuristic architectures. Multi-storey buildings, exhibition halls and a completely new infrastructure have risen from the ground.

The 468-metre-high television tower, “Oriental Pearl”, is now the landmark of the city’s development to a global economic hub.

cityscope was commissioned to visually document the urban development process of Pudong in order to present it to the public. A panoramic camera was installed on top of the Haiwan Building, which is located on the northern bank of the Huangpu River.

The camera records and stores the panoramic pictures on an hourly basis. The recorded image sequence shows the spectacular skyline of Pudong and documents its ongoing changes.



Pudong view

城市全景

Shanghai Panorama Presentation



Exhibition Hall Pudong

Time Journey Pudong

The presentation occurs at two multimedia exhibitions dedicated to Pudong's urban development using custom-made terminals.

The panoramic images are shown on a six-meter-wide video screen. The visitor can view the current skyline of Pudong as well as time-lapse movies and individual images by using a specially designed interface. The presentation can be altered by scrolling two different wheels assigned to time and date.

All this enables visitors to experience an interactive time journey through the ongoing development of the Chinese metropolis.



Panorama Projection and Terminal



24.03.1999 • 12:00

Federal Chancellery ↕ Adidas Arena

↕ Embassy of Switzerland

Paul-Loebe Building

Reichstag Building



07.07.2006 • 12:00

Event Online

With online TV, live video streams and Webcams, the Internet has turned into an unequalled media landscape. Especially for the purpose of documenting events of all sorts, the Web offers a number of new communication options.

The special features of Online Panorama make it a particularly adequate tool to document and present events of all kinds. The procedure developed by cityscope enables the comprehensive documentation of the temporal and spatial dimensions of an event on the Internet or any other digital medium.

The Complete View

Stage or audience - that is no longer the question. The panoramic image offers space for both: Compared to the ordinary Webcam picture, the online panoramic image conveys so much more visual content.

The angle of vision of the panoramic image authentically represents human spatial perception and thus gives the best possible impression of the event taking place.

The Panoramic Camera

The on-site camera system records minute-by-minute panoramic images and virtual reality movies of the event being documented. In addition, individual pictures in standard format, as well as live stream broadcasts using a freely selectable point of view, can be transmitted.

Web Presence

The following formats can be used to present the documented event to the world-wide public:

- the current panoramic image and the Quicktime VR movie show the present situation at the location.
- the online picture archive makes it possible to chronologically retrace the event.
- time-lapse movies condense the period of the event and display what has taken place in rapid succession.
- time-lapse movies condense the period of the event and display what has taken place in rapid succession.

Picture Archive

In addition to the current online presentation, the panoramic images can be stored digitally in high resolution to be utilized in different media, including TV, CD-ROM, DVD, print etc.

Event on the Web

The Online Panorama with its special combination of spatial and temporal depiction offers excellent means to visually present events. This makes the medium indispensable for project communication.

For further information please visit our Website

www.cityscope.de or contact us via email (service@cityscope.de).





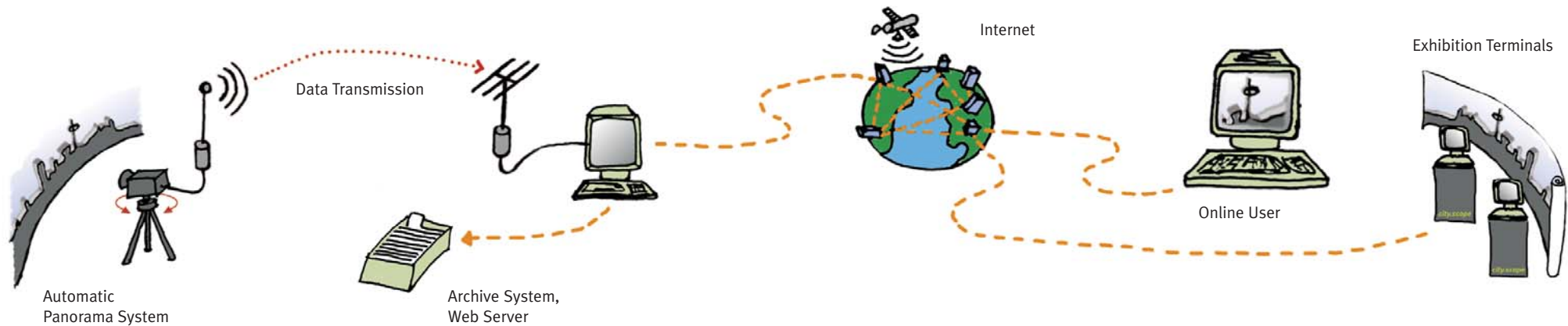


Assembling of the Telecom-Digit



Expo 2000 Hannover • 02.09.2000 • 14.00

The cityscope System



The Online Panorama offers new state-of-the-art communication possibilities for the visual documentation of live events and architectural processes. For space- and time-based documentation, the procedure developed by *cityscope* employs digital panoramic images which are recorded by a computer-controlled camera. The images are immediately stored and can be retrieved instantly via the Internet or presented on exhibition terminals.

Picture Archive

In addition to the up-to-date presentation, the panoramic images are archived in high quality and can thus be used in various media such as TV, CD-ROM, DVD, print etc.

The Panoramic View

Compared to the standard format picture, the panoramic image conveys much more visual content. The panoramic images' angle of vision, ranging up to 360 degrees, represents human spatial perception, thus giving an optimal impression of the situation on site.

Space and Time

The Online Panorama, with its unique combination of spatial and temporal depiction, offers manifold possibilities of visual presentation and multimedia project communication.



VPT 28 Panorama Web cam Berlin Alexanderplatz



HPT 36 HiRes-System



DPS-3MX Shanghai, Haiwan Building

Panoramic Recording Technology

The panoramic camera systems developed by cityscope consist of a digital recording module (camera) and a computerized control system. In a waterproof housing, the camera can be installed at any indoor or outdoor location for operation under any weather conditions.

The camera system records a series of individual shots from programmable points of view. The pictures are then assembled seamlessly to the panoramic image in a computerized process.

Pan Tilt Systems (cityscope series VPT and HPT) are based on a rotatable recording module. The individual pictures of the recorded series are captured sequentially.

Multi Module Systems (e.g. series MX) consist of a number of modules set up with adjacent points of view. The modules are synced to take pictures at the same instant, leading to a panoramic picture without time-glitches.

For further technical information please refer to our website www.cityscope.de

Journey through Space and Time - The cityscope Terminals



Okinawa: Mobile Terminal as part of the Berlin presentation at the G8 Summit (July 2000, Partner für Berlin)



Timeline interface for navigation in space and time



Brussels: Exhibition by the Federal Ministry for Foreign Affairs

Year	Client	Project
1995 - 2005	Self-initiated project of cityscope	Potsdamer Platz - urban development documentation → www.cityscope.de
1996 - 2002	Federal Ministry for Transport, Building and Housing	Time Journey Spreebogen - documentation of the parliament and government district <i>Presentation: Paris 1996 - Berlin 1997/99 - Brussels 1998 - Okinawa, Tokyo 2000 - Sao Paulo 2001</i>
1997	Partner für Berlin	Berlin Gate - Panoramic presentation at Frankfurt International Airport.
1999 - 2001	German Exhibition AG	Messepanorama - online documentation of CeBIT and the industrial fair in Hanover
1999 - 2001	Love Parade Berlin GmbH	Love Parade - event documentation (online panoramic images and live video streaming)
1999 -	tesion Kommunikationsnetze	city-Panorama Stuttgart - online Stadtpanorama → http://webcam.versatel.de
2000 - 2001	HVB Projekt GmbH	Park Kolonnaden - online construction site documentation
2000	Expo 2000 GmbH	Expo 2000 - construction and event documentation of the world's fair in Hanover (3 cameras)
2001 -	Daimler Chrysler Real Estate AG	Skyline-Panorama Potsdamer Platz: www.potsdamerplatz.de
2002 -	Deutsche Bahn AG	Berlin Central Station - online documentation and terminal presentation
2003 - 2006	DFB Culture Foundation	FIFA World Cup Globus - Event documentation (video streaming) → www.fifaworldcup.com/globus
2004 -	Anschutz Entertainment Group	O2 World - construction site documentation of multipurpose arena
2004 -	Hochtief AG	Gendarmenpalais - online construction documentation
2004 - 2005	T-Com AG	T-Com Haus - online construction documentation
2005 -	Regional administration Shanghai	Time Journey Pudong - Skyline view presented on exhibition terminals
2005	Provincial capital Dresden	Dresden Neumarkt - long-term urban development documentation → www.dresden.de
2006	Senate of Berlin	Palast der Republik - dismantling documentation → www.stadtentwicklung.berlin.de
2006	Adidas-Salomon AG	World of Football - Event documentation on the occasion of FIFA World Cup 2006
2006	Stage Entertainment GmbH	Blue Men Group - Conversion of a theatrehall