



# OPEN DESIGN COMPETITION A NEW BIKE SHARE SYSTEM FOR COPENHAGEN

- COMPETITION PROGRAMME

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# 1 INVITATION

In 1995, Copenhagen was the first city to introduce a modern bike share system – Bicyklen - or The City Bike. Much has happened since this Bike Share v. 1.0 was launched and, over the past ten years, many large cities now enjoy exciting, new bike share systems. From Barcelona to Beijing, a new generation of bike share systems have blossomed. To the delight of locals, tourists and commuters alike.

Copenhagen is a unique, world-class cycling city and this fact should be reflected in the city's bike share system. Our city is the best example of how the bicycle can become the preferred form of transport in a modern city. An attractive and modern bike share system can contribute to strengthening Copenhagen's bicycle culture. Therefore The City of Copenhagen is pleased to launch an open design competition in order to determine how a bike share system v. 3.0 would look and work in the city in the future.

The possibilities are numerous and only the fantasy sets the limit. It is therefore my hope that this open design competition will result in an interdisciplinary solution and that many people will enter their ideas so that in a few short years we can show off an innovative bike share system here in the City of Cyclists.

Good luck.



Klaus Bondam  
Mayor of the Technical and  
Environmental Administration  
City of Copenhagen



# 2 BACKGROUND FOR THE COMPETITION



Copenhagen has a bicycle culture that is so widespread and such a natural part of city life that very few people regard themselves as cyclists. Most see themselves merely as citizens who transport themselves from A to B. The numbers speak for themselves. The 519,000 people who live in the City of Copenhagen own 560,000 bicycles. In addition there is a similar bicycle culture in the City of Frederiksberg, which borders Copenhagen and is considered, in many ways, to be a part of Copenhagen.

37% of everyone who works or attends educational institutions in Copenhagen uses a bicycle to get there and the city has over 350 km of bicycle tracks. Even the traffic lights on several main streets are regulated for the cyclists instead of cars so that if they ride at 20 km/h they will hit green lights all the way, without putting a foot down.

The many cyclists and the bicycle friendly infrastructure mean that it is easy and safe to cycle in Copenhagen. The motorists know that they have to be aware of bicycles and roads and intersections are designed with both the cycling Copenhageners and the city's cycling guests in mind.

In contrast to many other cities it is easy and accessible for visitors to Copenhagen to ride a bicycle around town. Therefore the bicycle has the potential to contribute greatly to a city that is both sustainable and easy to get around. It is this potential that a new bike share system must focus on.

# GOALS OF THE COMPETITION

# 3

The winning entry for a new bike share system for Copenhagen must adhere to the City's primary goals for the future development of the city. The goals are that Copenhagen must be a sustainable and dynamic city and a city for everyone.

## MORE SPECIFICALLY, THE DESIGN COMPETITION IS THE FIRST STEP TOWARDS COPENHAGEN IMPLEMENTING A NEW BIKE SHARE SYSTEM THAT IS...

### ... AN ATTRACTIVE PRODUCT FOR THE CITY'S GUESTS.

The City of Copenhagen has a defined goal that 50% of all commuters arrive at work or education by bicycle by 2015. A new bike share system must make cycling in the city even more attractive for commuters and visitors from the rest of Denmark and beyond.

### ... A FAITHFUL FRIEND IN AN HOUR OF NEED FOR COPENHAGENERS.

Even a Copenhagenener can, in rare moments, find him or herself without a bicycle. Perhaps it's broken or parked elsewhere. In such a situation the new bike share system should be easily accessible to the locals.

### ... UNIQUE, ELEGANT AND ATTRACTIVE.

The bike share system of the future should unite design and technology and should be a unique and attractive transport option in the city. Copenhagen is a unique cycling city and any new bike share system should be a shining symbol of this fact.

### ... AN INDISPENSIBLE PIECE OF THE TRANSPORT PUZZLE FOR TRAIN PASSENGERS.

People arriving in Copenhagen by train should experience an effortless and quick connection between the train and the bicycle, regardless of whether they arrive daily or only on occasion.

### ... EASILY INTEGRATED AND IMPLEMENTED IN AN EXISTING CITY.

The concept should be able to be easily implemented in Copenhagen's urban landscape and be an enriching element to the cityscape, parks, train stations or to large workplaces and educational institutions.

### ... ROBUST.

The bike share system must be robust enough for constant use without compromising elegance.

# THE COMPETITION'S ASSIGNMENT AND CRITERIA

# 4



## 4.1 THE ASSIGNMENT

The competition is a design competition for a new bike share system for the City of Copenhagen. The competition entries should highlight both design and functionality. In short: What will the new bicycle and the system look like? How does it work? How will it be integrated in the city? How does the collective concept work – from booking and locating the bicycles to paying for them and delivering them back?

The competition will run from September 1, 2009 to November 18, 2009. The winner will be announced during the United Nation's Climate Conference [COP 15], which will be held in Copenhagen in December 2009.

### What is a "Bike Share Concept"?

If we already knew what the bike share system of the future looked like, we wouldn't need a design competition. The goal is a bike share system for Copenhagen that is both innovative and tailor-made for this city's status as one of the world's most bicycle-friendly cities. In relation to this, the entries must address, but not be restricted to, the following points:

#### 4.1.1 The Bicycle Design

What will the bicycle in the future bike share system look like? How will it work?

We need a new design for a bicycle. The bicycle's target group is first and foremost commuters who arrive in Copenhagen and Frederiksberg by train, bus or metro and who will be willing to use the bicycles as a part of their journey to work, educational institutions or to meetings and the like. In addition, the bicycles will be for tourists and Copenhageners who are without a bicycle for shorter or longer periods.

The bicycle is not personal and will be typically used for short journeys [1-5 km]. The City of Copenhagen would

like to see ideas for integrating technological solutions that can improve the bicycle's comfort and user friendliness. For example, including GPS in the bicycle's design.

#### 4.1.2 Storage

How is the bicycle stored when not in use?

When regarding 'storage' it is paramount to consider the importance of the bike share system's integration with public transport. Entries should include harmonious, well-integrated ideas about how the bicycles will be parked or stored in connection with:

- Small and large stations [Metro, local trains, trains and large bus terminals].
- City spaces [squares, streets, etc.].
- Large workplaces and educational institutions.

#### 4.1.3 Booking, Access and Payment

How do you book a bicycle from the bike share system? How do you access one and drop it off again? How does the user pay/register for usage?

The City of Copenhagen is looking for innovative and practical solutions that meet consumer demands for ease-of-use, flexibility and accessibility regarding the new City Bike. It is fitting to integrate the technological perspective under this point. For example, web-based solutions or mobile phone applications, etc.

Train passengers are a particularly important target group for the new bike share system. Competition participants are encouraged to be specific in describing how train journeys can be integrated with the bike share system as well as how booking and payment can be combined with seat reservation, commuter tickets/passes and other aspects of travel planning.

# THE COMPETITION'S ASSIGNMENT AND CRITERIA

# 4

It is The City of Copenhagen's wish that the competition entries directly and specifically relate to three target groups, represented by the following personas...

## TARGET GROUPS FOR THE NEW BIKE SHARE PROGRAMME

### PERSONA 1 THE COMMUTER

John Madsen is 48 years old and owns an architect studio in Denmark's second-largest city, Aarhus, located 300 km from Copenhagen. John attends meetings in Copenhagen several times a week. He usually travels by train in business class from Aarhus to Copenhagen and takes a taxi from the Central Station to his end destination, which is usually in the city centre. John enjoys taking the train as he can work on the journey but he often finds it irritating to have to sit in traffic in the taxi on the short three kilometre journey from the train station in Copenhagen. John is 190 cm tall and weighs 93 kg.

What can John get out of the solutions presented in the competition entry?

### PERSONA 2 THE TOURIST

Isabella is 22 years old and comes from Naples, Italy. She has just arrived at Copenhagen Central Station on a train from Hamburg. She is Interrailing around Europe with her friend and it is her first visit to Copenhagen. As soon as the girls have checked in at the hotel near Langebro and deposited their bags in the room they want to visit Christiania. Isabella is 158 cm tall and weighs 49 kg.

How can Isabella and her friend enjoy the solutions presented in the competition entry?

### PERSONA 3 THE COPENHAGENER

Harry is 35 years old and lives in the Nørrebro neighbourhood. He rides his bicycle every day to his job, where he works as a copywriter at an advertising bureau in the city centre. He lives roughly three kilometres from work. Harry chooses the bicycle because it is easy and quick. One morning Harry comes out of his flat to discover that his bicycle is stolen. It'll take a week or so for him to get money from his insurance company and to buy a new bicycle. It is especially irritating for Harry today, as he has four meetings around town. Harry is 175 cm tall and weighs 75 kg.

How can Harry get the most out of the solutions presented in the competition entry?

# THE COMPETITION'S ASSIGNMENT AND CRITERIA

# 4

## 4.2 ASSESSMENT CRITERIA

Competition entries for a new bike share system for Copenhagen will be judged on the following four criteria:

### 4.2.1 CRITERION 1

#### Overall Design Concept

The City of Copenhagen expects that the entire bike share system entry expresses a complete and supporting design concept that is visionary and which possesses a strong brand identity.

### 4.2.2 CRITERION 2

#### Design and Form

The City of Copenhagen expects that the entries for a new bike share system contain elements that underline the vision of a modern city, with emphasis on effective and environmentally-friendly transport forms. This criterion's assessment will be based on the following equally important sub-criteria:

- The design and visual expression of both the bicycles and the system as a whole.
- The newsworthy aspects of the technical qualities that make the system better than previous generations of bike share systems.
- Interaction between the bicycles and the rest of the equipment involved in the operating system.

### 4.2.3 CRITERION 3

#### Visibility, User-friendliness and Logistics

The new bike share system should be easy to use

and easy to access. This criterion will be judged on the following equally important sub-criteria:

- User-friendly booking and payment system.
- The quality of the bicycle's riding characteristics.
- The bicycle's placement and visibility in relation to its location, whether it be outside a workplace, educational institution or transport hub.
- Innovative ideas for ensuring that the bicycles are available where there is demand for them, as well as solutions regarding minimalising over-capacity and transport of the bicycles in relation to distribution around the city.

### 4.2.4 CRITERION 4

#### Interaction with the City

The new bike share system must possess the potential to strengthen the sustainable mobility in Copenhagen and, at the same time, interact with the city's architectural expression. In other words, the new system should compliment both the city and the people who use it. This criterion will be judged on the following equally important sub-criteria:

- The bike share system's potential as a preferred transport option between destinations in Copenhagen.
- The bike share system's interaction with the city's other transport forms, especially trains.
- The bike share system's architectural integration in the city's urban landscape.



# COMPETITION CONDITIONS

# 5

## 5.1 Description of the Assignment

The assignment is the development of a new concept for bike share system v. 3.0.

## 5.2 The Competition's Promoter

THE CITY OF COPENHAGEN

Technical and Environmental Administration  
Department of Traffic

Islands Brygge 37

2300 Copenhagen S.

Telephone: [+45] 33 66 33 66

EAN: 5798009 488145

Hereafter referred to as "The City of Copenhagen" or "Copenhagen".

The competition process is coordinated by the consultancy company, sbs, for The City of Copenhagen.

The contact person for the design competition phase is:

Kurt Kj. Christensen

sbs

cphbikeshare@sbsby.dk

## 5.3 Competition Type

This competition is governed by Directive 2004/18/EC of the European Parliament and of the European Council dated 31 March 2004.

Competition type: Open design competition.

The competition language is English. The spoken and written contract, negotiation and working languages after the submission of entries will be either English or Danish. The Danish version of the competition material will take precedence over the English versions.

## 5.4 Main Time Schedule

**TUESDAY, SEPTEMBER 1, 2009**

Publication of competition brief.

**WEDNESDAY, NOVEMBER 18, 2009**

Deadline for receipt of competition entries.

**MEDIO DECEMBER, 2009**

Assessment of competition entries.

## 5.5 Prizes

A total prize sum of up to 750,000 DKK [circa €100,000] will be awarded.

First prize is 250,000 DKK [circa €33,000]

Second prize is 150,000 DKK [circa €20,000]

Third prize is 100,000 DKK [circa €13,000]

The jury reserves the right to select up to three winners of the competition, and all the winners may be invited to participate in subsequent negotiations regarding contracts or further development of the idea[s].

For winners resident outside of Europe travel compensation may be made available - up to 15,000 DKK [circa €2,000].

## 5.6 Special Prize for the Most Exciting Bicycle Design

In the midst of the new bike share system is the bicycle itself. The jury will therefore award 50,000 DKK [circa €6,500] for the most exciting bicycle design among the competition entries. This special prize is separate from the jury's assessment criteria in chapter 4.2 – Assessment Criteria - but only entries that fulfil all of the competition's criteria will be considered for this special prize.



# 6 CONDITIONS FOR SUBMISSIONS OF ENTRIES

## 6.1 Rights

Ownership and copyright of the entries remain with the entrant until a transfer to the City of Copenhagen takes place. The transfer of rights does not occur in the event of an entry winning, but rather occurs in association with purchase of the entry or agreement of collaboration regarding the possible further development of the chosen concept[s].

The City of Copenhagen will be entitled to publish submitted entries in newspapers, trade journals, electronic media and elsewhere. The names of the entrants will be mentioned in connection with such publication.

## 6.2 Insurance

The received entries will not be insured. The City of Copenhagen will assume the entrants retain originals of the received material.

Compensation will be paid in the event of received entries being damaged or lost, provided that the entry material was intact upon receipt.

## 6.3 Publication of the Entries

All entries will be made public on the competition's website: [www.cphbikeshare.com](http://www.cphbikeshare.com)

The City of Copenhagen reserves the right to exhibit entries that are selected for judging.

## 6.4 Questions

Questions must be in writing only and should be sent by e-mail to: sbs

Kurt Kj. Christensen  
[cphbikeshare@sbsby.dk](mailto:cphbikeshare@sbsby.dk)

Questions must be received prior to Friday, October 16, 2009 at 12:00 PM

Questions and answers will be added to the competition's website on an ongoing basis: [www.cphbikeshare.com](http://www.cphbikeshare.com)



# 7 COMPETITION MATERIAL

## 7.1 Distribution of the Competition Material

sbs, on behalf of The City of Copenhagen, will make the competition material available on the competition's website: [www.cphbikeshare.com](http://www.cphbikeshare.com)

## 7.2 Supplementary Competition Documents

The following documents are included as informative background information about Copenhagen in the competition material. The documents can be downloaded from the competition's website: [www.cphbikeshare.com](http://www.cphbikeshare.com)

- Bicycle Account 2008.
- City of Cyclists - Copenhagen Bicycle Life.
- Eco-Metropolis - Our Vision for Copenhagen 2015.
- A Metropolis for People - Visions and Goals for Urban Life in Copenhagen 2015.
- 3 minute 'profile film' about Copenhagen, The City of Cyclists.

Further information about Copenhagen as a bicycle-friendly city can be found at [www.kk.dk/cityofcyclists](http://www.kk.dk/cityofcyclists)

## 7.3 Competition Programme

Information to be made public during the competition period:

The Competition Programme  
The Competition Rules

### *Supplementary Competition Material*

The City of Copenhagen reserves the right to publish supplementary material about the competition. Supplementary material will be made public on the website.

It is the entrant's own responsibility to follow updates on the website regarding supplementary material, corrections and changes.

# RULES FOR COMPETITION ENTRIES

# 8

## 8.1 Form and Scope

Entries must be anonymous so that identification of entrants is not possible. All parts of each entry must therefore be clearly marked with a five-digit identification number chosen at random.

When sent in, entries must be wrapped in non-transparent material and the five-digit identification number must be written on the package.

Each entry must comprise the following materials packed in separate packages wrapped in non-transparent material and provided with the five-digit identification number chosen. The packages must contain the following materials:

- Envelope with Identification Sheet.
- Digital material.
- Digital concept material – for example, powerpoint with descriptions and illustrations, photos, etc.
- Digital illustration material – Illustrations, photos and drawings.
- Description booklets – 10 copies.

The minimum requirement for entries is sketches and 3D renderings that clearly describe the project and fulfill the design competition's criteria, as outlined in Chapter 4 – The Competition's Assignment and Criteria. The headlines above must be placed on each of the respective packages. Only one entry per competition participant is allowed.

Entries must be sent in without reservations.

Entries must be sent in according to the competition's rules. Entries that do not adhere to the rules will not be considered.

Competition participants are encouraged to send in scale models or prototypes of the bicycles or of other elements of the new bike share system, but these scale models or prototypes will not be taken into consideration in the jury's assessment.

### 8.1.1 Envelope with Identification Sheet

A non-transparent, sealed envelope containing an identification sheet with the entrant's name, address, telephone number and e-mail address, plus the name of a contact person and the identification number chosen for the entry.

Furthermore, the sheet must contain information on who has the copyright to the entry and who was involved in the preparation of the entry (design team, consultant, adviser, etc) but has no share in the copyright.

The word Navnekuvert ('identification sheet') and the five-digit identification number chosen by the entrant must be written on the front of the envelope.

### 8.1.2 Digital Material

Each entry should contain three [3] CD-R's/DVD's with the following content:

#### *Digital concept material*

Digital material should include all the necessary information. A description and a visualisation in sketch form and 3D renderings of the concept in relation to Chapter 4. The description and visualisation must not exceed 40 slides in, for example, a powerpoint presentation.



# RULES FOR COMPETITION ENTRIES

# 8

## *Digital illustrations, photos and drawings*

- All illustrations and texts included in the entry should be prepared for reproduction in the jury's report. Illustrations should be in an unlocked PDF format and in JPG format. There must be a separate file for each illustration.
- A PDF file with a description booklet.
- For web and exhibition use, entrants are requested to submit a picture/an illustration of their proposals as well as a brief written description of the proposal. The picture/illustration must be submitted in two different resolutions: JPEG with 72 dpi and a maximum of 300 x 300 pixels, and JPEG with the highest possible resolution. The text may not exceed 500 characters including spaces. Entrants are free to choose the illustration they believe best presents their proposal to the broad range of people who will visit the website or possible exhibitions.
- A PDF file with the concept material in the form of panels, in case of the material being exhibited. The panel should be two A1 panels [594 x 841]. The material should be ready to print as panels.
- The CDs must be provided with the chosen five-digit identification number.

### **8.1.3. Description Booklet**

Ten copies of the entry in the form of A4 booklets must be submitted. Each booklet must contain the following:

- Illustrations and text provided in the concept.
- Maximum 15 pages.
- The five-digit identification number must be written on the booklets.

### **8.2 Submission of Competition Entries**

Entries must be anonymous and submitted in a way which does not reveal the entrant's identity.

Entries must be submitted to the City of Copenhagen via **sbs** at the following address:

**sbs**  
Ny Kongensgade 15  
DK-1472 Copenhagen K  
Denmark  
*Attention*  
"cphbikeshare - competition - Kurt Christensen"

Entries may only be handed in on weekdays between 9.00 am and 3.30 pm.

Please note that the material may only be sent by registered mail, as a postal parcel or by an express delivery service.

Competition entries must reach The City of Copenhagen no later than:

**WEDNESDAY, NOVEMBER 18, 2009 AT 1:00 PM**



# 9 ASSESSMENT ASSESSMENT

## 9.1 Assessment

Competition entries will be assessed by a jury composed of:

- **Klaus Bondam**  
Mayor, Copenhagen's Technical and Environmental Administration, City of Copenhagen.
- **Gert Frost**  
Managing Director, DSB S-train Danish Railways.
- **Margit Ørsted**  
Vice-Mayor, City of Frederiksberg.
- **Anette Krath Poulsen**  
Architect & Designer mDD.
- **Christian Bjørn**  
Industrial designer mDD.
- **Troels Heien**  
Graphic Designer & Architect mDD/MAA.

### Advisors to the Jury

- **Jan Christiansen**  
City Architect, City of Copenhagen.
- **Andreas Røhl**  
Head of Copenhagen's Bicycle Programme, City of Copenhagen.
- **Peter Schøller Rasmussen**  
Head of Roads & Parks Dept., City of Frederiksberg.
- **Troels Andersen**, Traffic Planner, M.Sc., COWI A/S.

The jury is entitled to call in both City of Copenhagen staff and external consultants

as advisers if the jury members find it necessary.

The jury reserves the right to select up to three winners of the competition.

## 9.2 Assessment of Entries

In the assessment of the compliance of competition entries, it will be checked that all the material mentioned in 8.1 above is included. Entries that fail to comply with some requirements may be rejected.

The City of Copenhagen emphasizes that all entries should live up to the demands set out in the competition guidelines.

Entries will be assessed in two rounds.

In the first round the entries will be assessed generally. Points from 1-10 will be given.

Projects that receive marks of 6 or higher will go on to round 2.

In the second round the entries will be assessed in relation to the competition's criteria, as laid out in 4.2.

- |   |     |
|---|-----|
| • Overall design concept                      | 20% |
| • Design and form                             | 30% |
| • Visibility, user-friendliness and Logistics | 30% |
| • Interaction with the city                   | 20% |

# 10 WINNING THE COMPETITION THEN WHAT?

Once the winner or winners of the design competition have been selected, the envelope with the identification sheets will be opened and the potential lead consultants identified.

The City of Copenhagen has a clear ambition that the winning entry will become a central element in the further development of a new bike share system in Copenhagen and Frederiksberg. Possible negotiations will begin at the beginning of 2010.



# 11 POLITICAL AND REGULATORY APPROVAL

# 12 THE PROGRAMME'S APPROVAL

Realisation of the project depends upon final approval being granted by political and regulatory authorities.

On August 27, 2009, Copenhagen City Council approved the resolution to launch an open design competition for a new bike share programme.

The Technical and Environmental Committee of the City of Copenhagen must be informed of the final competition result.

There will be no public consultation.

**THE COMPETITION PROGRAMME IS APPROVED BY THE CITY OF COPENHAGEN AND DANISH DESIGNERS AND THE BUREAU OF EUROPEAN DESIGN ASSOCIATIONS.**

[www.cphbikeshare.com](http://www.cphbikeshare.com)

LAYOUT **TMF DESIGN**  
PHOTOS **CITY OF COPENHAGEN**



I  CPH

**COPENHAGEN  
TOGETHER**

**CITY OF COPENHAGEN**  
The Technical and  
Environmental Administration