

Future Bike CH Schweiz

International Competition for Ideas

Car Dinghy*

The solution is not only to be a commuter vehicle or a leisure vehicle but to function as a companion onboard of a train or car.

Competition Programme

Introduction

The car is indisputably the most prevalent means of transport. But for many purposes it is not optimal, e.g. to get into the city or as a means of exercise. Exercise in a car, how can that be done? Many people have become aware of this and take bicycles with them either in the car or on a rack. These bicycles then stand on the roof or hang on the back. The whole thing looks like a design from the early ages of industrialization and has the same drag as a barn door.

It would be more intelligent when a Human Powered Vehicle (HPV) designed for this purpose could be taken along as unobtrusively as with the spare tire. Instead of searching for a parking lot one could park the car outside the city, and pedal away conveniently with the special purpose bicycle. In this way it can be shown that an HPV is more agile and more practical than a car. This cycle taken along in the car also could be used as a means of extended mobility at any time.

Aim of the Competition

The purpose of the competition is to present to the public concepts of a „Car Dinghy“ which can be taken along in a car unobtrusively, and is ready to use both in urban and rural areas.

Competition Challenge

The HPV is not to be mounted outside of the automobile but inside or on the vehicle in such a way that the drag is not increased nor do protruding parts create danger for others on the road.

The user should be able to take the HPV out of the car and put it to operation without his hands or clothes becoming dirty. It will fulfill its purpose when it enables the user to take rides of 5 km (3 miles) or more, as well as rides from the outskirts of town to the city center, be it for leisure or for exercise. Minimal weather protection (e.g. protection against splashing from the wheels) is desirable to prevent the rider's clothes from becoming wet. Additional aims of the competition are a simple and safe method for transporting some baggage, improved protection against rain and a good seat comfort for the rider. But it is most important that the HPV be simple to put into operation and enjoyable to ride.

The transporting automobile should not become bigger and heavier with the HPV on board. Ideally the HPV would not require more space than the spare wheel on board

nowadays. The spare wheel can be made redundant because people stay mobile with the HPV in a case of an emergency. To design a HPV which is lighter than a spare wheel should be realistic as a spare wheel weighs 20kgs (44lbf) or more. The competition is mainly about the HPV. Suggestions on where and how to store the HPV in or on the automobile are welcome.

The HPV has to meet very high design criteria. It may not take additional space in the motor vehicle and must be easily put into operation and provide good rider comfort. The user may neither get dirty when putting the vehicle into or taking it out of the car, nor when riding it. Ideally it should be possible to take some luggage. Today's folding bicycles hardly meet the competition requirements. New solutions are requested.

This is why the Future Bike CH club has arranged this Ideas Competition on the design of a „Car Dinghy“ as a replacement for the spare wheel in advanced automobiles. In the long run the aim would be to equip all cars with an integrated HPV in order to keep the rider mobile in case of a breakdown of the car or when stuck in a traffic jam. As soon as cars are equipped in this way, larger areas of the inner cities could be made carfree. Around today's pedestrian areas, cycling regions could be established in the city. Older cars can be „retrofitted“ with the Car Dinghy stored where the spare tire used to be.

Competition

The competition will be arranged as an anonymous Ideas Competition. In other words, during the competition judging, the names of the contributors will not be known to the jury. Only when the judging is completed will the envelopes with the contributor codes be opened and the names of the project authors published.

The project proposals shall be presented on two sheets A3 in size (one sheet with text and one sheet with illustrations). Models are allowed to enable a better understanding of the proposed idea, but not required. The submitted ideas will be allowed to enter the competition, then judged, prized and in the end published in a brochure giving the names of the authors.

Judging of the Projects

Grading System

A system of 1 to 4 points is used with the following scores:

Does not meet the requirement	1 point
Fair	2 points
Good	3 points
Very good	4 points

Criteria and Weighting

1. Originality	10%
2. Easy operation	20%
3. Safety features (brakes, lights, riding characteristics ...)	20%
4. Requiring a minimum of storage space in the car	20%
5. Minimal weather protection	10%
6. Costs (exotic materials and technologies, complicated shapes)	20%

Example: When the originality of a submitted project is judged to be „good“ (3 points), this yields 30 points in total (3 x 10), etc.

The maximum number of points (without any additional points) is 400 points.

Projects with 300 or more points can receive additional points.

Additional points: HPVs with

- A functional weather protection
 - A seat which can be individually adapted
 - A good solution for the transport of luggage
- will be credited with 1 to 4 additional points with a weight of 10%.

A maximum of 520 points is possible when the extra points are included.

Criteria for Exclusion/ Legal Action

Feasibility will not be a criterium in the rating but instead will be a knock-out criterium. Projects which contain ideas comparable with the Perpetuum Mobile, i.e. they are not compatible with the laws of nature, will of course be excluded. Furthermore the jury has the right to exclude projects from the competition which it deems to be not realizable. Simple majority rules.

Prizes/ Rewarding/ Costs

The total prize money of CHF 10'000 will be awarded as follows:

1st prize	CHF 4'000.00	
2nd prize	CHF 2'000.00	
3rd prize	CHF 1'000.00	
The next 15 projects each receive CHF 200.00		CHF 3'000.00
Total		CHF 10'000.00

Organizer

The competition is organized by the club Future Bike CH, Switzerland.

Organizational Issues

The concept for the competition has been approved by the sponsor and by the board of the Future Bike CH club.

Competition Programme/ Realization

The competition programme has been created by the planning group of the Car Dinghy competition who will also oversee the competition. These are Paul Rudin, founding member of the club Future Bike CH, and Christian Precht, editor of the magazine of the club Future Bike CH.

The competition programme has been approved by the jury.

Jury

Members of the jury with voting rights

- Mr. Hans Ueli Feldmann, Prof. for Vehicle Design, Department Automobile Technology, School for Technology and Information Sciences, Biel, Switzerland

- Mr. Robert Stolz, Frame Builder and Owner of Fahrradbau Stolz, Zürich, Switzerland

- NN

Chairman and Substitute without voting rights

- Mr. Paul Rudin, Founding member of the club Future Bike CH

Obligations

Those taking part in the competition accept herewith the terms of the competition and the jury's decision in all discretionary matters.

Legal Issues

The competition will be executed according to Swiss law, that is all documents or models which are submitted will be property of the the club Future Bike CH. Also, no claims can be made of the Future Bike CH club or third parties, by participants in the competition.

The submitted projects (the project portfolio and models, if applicable) will be property of Future Bike CH. The Future Bike CH club will have all rights to publish or distribute these documents, however the club also has the duty to also publish the name of the author. All rights will remain with the author.

Taking legal action is prohibited for the entire competition.

Brochure/ Request for Proposals

Brochure

A brochure will be created with all submitted projects included. This brochure will be given to all competitors for free. It will be available to any other for a service charge.

Request for Proposals

The competition will be published on the Internet and in the InfoBull (the club magazine of Future Bike CH and HPV Deutschland) and other trade magazines (Velovision, Ligfiets&, Recumbent Cyclist News, ets.)

The projects shall be submitted on paper.

German and English will be used in the competition (The german version will be authoritative).

Questions regarding the competition will be answered on the Internet at www.futurebike.ch.

Submission of Competition Projects

The competition projects must be sent to the jury on paper. Any correspondence will be done via e-mail.

It is the duty of the Future Bike CH club to create a brochure presenting the project documents. This brochure will be sent to all competitors for free.

Documents to be submitted

- Two pages A3 (one page text, one page illustrations) on paper
- Models, if desired
- Name, address and bank details of the authors of the project in a closed envelope with a code word.

Publication

The brochure will be published by the Future Bike CH club in issuing press releases to daily papers, trade magazines (car manufacturers and bicycle manufacturers, respectively). The brochure will be sent to interested parties on request.

Dates

The competition will be closed within five months after the request for proposals has been published.

Dates:

- Request for proposals starting January 1, 2008.
- Questions regarding the competition can be asked at rudin-vonwil@bluewin.ch until the end of February, 2008.
- Question will be answered publicly until the beginning of March, 2008.
- Projects have to be submitted to the club Future Bike CH by April 30, 2008.
- Judging of the projects and publication will take place until the end of May, 2008.

Place and Date to Submit the Projects

The projects and models if applicable as well as the envelope with the name of the author or the authors must have arrived in a closed envelope labeled with a code word not later than April 30, 2008 addressed to Paul Rudin, Effingerstrasse 99, CH-3008 Bern, Switzerland.

RuP/ChP/ErP Bern, October 31, 2007