

Priority 6.2 “Sustainable Surface Transport”

Find Czech partner(s) for TREN-4 call for proposals

***Catalogue of cooperation offers from
Czech Republic***

FP6-2005-TREN-4

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Company details:

Company: **BONATRANS a.s. (stock company)**

Contact person: **Ing. Petr Matusek, CSc., the head of the research**

Town: **Bohumin** Postcode: **735 94**

Street: **Bezrucova 300**

Telephone: **+420 597 082 625** Fax: **+420 537 082 814**

Mobile: **+420 602 135 885**

E-mail: **pmatusek@bonatrans.cz** www. **bonatrans.cz**

Main activities:

Development, production and maintenance of railway wheelsets, bogies and its parts. The production of wheelset parts (wheels, axles, tyres) in "as-forged" state in own metallurgical plant from the steel billets produced at European steelshops. Wheelset part machining, anti-impact and anti-corrosion coating and wheelset assembling. The production (in cooperation) and assembling of noise and vibration dampers on solid and rubber-sprung wheels. The production (in cooperation) and assembling of brake discs mounted on the solid wheel web and press-fitted on wheeelset axle seat. Complete set of wheelset and its part quality testing for customer acceptance process, testing for research and development purposes.

Research and development - material research (steel, cast iron, rubber, the testing of its mechanical properties) for the parts of wheelsets, the noise and vibration of wheels in railway and urban traffic, the research of the service life of the wheelsets and its parts (computer modelling, material research).

Sustainable surface transport**1.6.2.1 'New technologies and concepts for all surface transport modes (road, rail and waterborne)'**

CIVITAS Dissemination and Best Practice Transfer Action

1.6.2.2 Advanced design and production techniques**1.6.2.3 Re-balancing and integrating different transport modes****Interoperability of the European Railway System**

New concepts for trans-European rail freight services IP

Intermodal transport and Logistics

Motorways of the sea (MoS) IP

EU co-ordination and promotion forum on intermodal passenger travel CA

Knowledge base for intermodal passenger travel STREP

Safe, secure, efficient and interoperable waterborne transport

Vessel data management (Voyage data recorder, Electronic logbooks) STREP

1.6.2.4 Increasing road, rail and waterborne safety and avoiding traffic congestion**Road Safety strategies****Integrating Intelligent Transport Systems****Implementation of Transport Pricing**

Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: **Brown Coal Research Institute j.s.c.**

Contact person: **Ing. Marcela Safarova – director**

Town: **Most** Postcode: **43437**

Street: **Budovatelů 2830**

Telephone: **+420 476208601** Fax: **+420 476706948**

Mobile: **+420 602429994**

E-mail: **safarova@vuhu.cz** www. **www.vuhu.cz**

Main activities:

Main activities focused on surface transport:

- Processing of the complex calculations of the technological conveyers, long-distance belt conveyers and the partial power-driven conveyers.
- Calculations of the dynamical actions of transfer points and their follow up elimination.
- Tuning of power units of the multi-drum power stations with the maximum capacity of 1000 kW.
- Operation measuring of mechanical and electrical values including parametres of electromagnetic compatibility of the belt conveyers.
- Company owns relevant computation programmes.

About company:

The Brown Coal Research Institute (VÚHU) was established in 1953 as a common organisation of mines in order to find solutions of the complex problems associated with development of opencast brown coal mining. Primary targets were aimed at the problems of mining-geological and hydrogeological conditions, chemical composition of coal matter and its utilisation, and quality and accumulation of overburden rocks. In recent years the scope of activities was extended from the field of applied research also to expertise activities of engineering advisory and to the field of testing.

VÚHU has 4 specialised research departments and accredited laboratory. It has the statue of resort test-room and is authorised to execute state testing in the field of certification of products arising from combustion, equipment with large-machines of opencast mines and floating machines. There has been introduced a Quality Management System according to ČSN EN ISO 9001:2001.

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Road Safety strategies

Integrating Intelligent Transport Systems

Implementation of Transport Pricing

Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: CHEMAPEX Praha, Ltd

Contact person: Jaroslav Jansa, Ph.D., Jiri Ehrlich, M.Sc.

Town: PRAGUE Postcode: 170 00

Street: V Haji 15

Telephone: +420 283 871 481 Fax: +420 283 870 487

Mobile: +420 777 234 173

E-mail: chemapex@maha.cz www. chemapex.cz

Main activities:

Interactive digital television – DVB-T, DVB-H, DVB-S

Wireless broadband services – UMTS, GPRS, WiFi, INMARSAT

GNSS and navigation systems – GPS, EGNOS, GALILEO

Complex communication systems for rescue and police squads

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Company details:

Company: CityPlan Ltd

Contact person: Ing. Jiri Landa

Town: Prague 1 Postcode: CZ 110 00

Street: Jindriska 17

Telephone: +420 221 184 204 (205) Fax: +420 224 922 072

Mobile: +420 603 494 805

E-mail: jiri.landa@cityplan.cz www. cityplan.cz

Main activities:

traffic safety and security, risk infrastructure, public and individual transport planning and modelling, transport master plans, highway and bridge design, inter-modal transport, traffic simulation, traffic control, safety audits and risk analysis, infrastructure development, economic studies, intelligent transport systems, engineering, site supervision, Feasibility Studies, Traffic survey and measurement, optimisation of systems and services, distribution of transport planning software PTV VISION, transport research on above topics, Transport Pricing Scheme Evaluation.

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: Stavby silnic a zeleznic, a.s. (Construction of roads and railways - stock company)

Contact person: Mgr.Zdenek Prochazka

Town: Prague Postcode: 113 19

Street: Narodni 10

Telephone: +420 224 952 020 Fax: +420 224 933 551

Mobile:

E-mail: prochazkaz@ssz.cz www. ssz.cz

Main activities:

Construction or reconstruction of roads, motorways, urban roads, railways and tram tracks, sport stadiums and areas, sewerage and voter distribution systems, road marking portals, bridge dilatations, steal and prefabricated segments.

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Company details:

Company: Czech Railways (joint stock company)

Contact person: Milos HRDINA, Ing.

Town: Praha Postcode: 561 51

Street: Nabrezi L. Svobody 1222 / 12

Telephone: + 420 972 232 543 Fax: + 420 972 232 534

Mobile: + 420 724 511 742

E-mail: Hrdinam@gr.cd.cz www. cd.cz

Main activities:

Railway Passenger, Freight and Combined Transport Operating activities.
 Railway Infrastructure Management
 Railway Rolling Stock Management and Maintenance
 Railway Infrastructure Maintenance
 Participation in Integrated Regional Passenger Transport Systems activities

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Company details:

Company: e4t electronics for transportation Ltd.

Contact person: Tomas Novak – R&D Manager

Town: Praha 4 Postcode: CZ-142 21

Street: Novodvorska 994

Telephone: +420 239 046 777 Fax: +420 239 046 755

Mobile: +420 603 212 818

E-mail: tomas.novak@e4t.cz www. e4t.cz

Main activities:

Research and advanced development of automotive electronic devices, transport telematics, communication devices (CAN, LIN, Bluetooth, WLAN, GPRS, RF.....), vehicle diagnostics and test devices, vehicle networking, drive data recording and visualisation...

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Company details:

Company: **ELTODO EG**

Contact person: **Prof. Pavel Pribyl**

Town: **Prague** Postcode: **142 01**

Street: **Novodvorska 1010/14**

Telephone: **+420 261343704** Fax: **+420 261341552**

Mobile:

E-mail: **pribylp@eltodo.cz** www. **eltodo.cz**

Main activities:

SCIENCE&RESEARCH PROJECTS OF SYSTEMS:
 - microsimulations
 - road user charging
 - parking applications
 - traffic management
 - applications for safety
 ITS STUDIES (system architecture...)
 CEN&ISO STANDARDIZATION (CEN TC 278, ISO TC 204)

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: Institute of Transportation Engineering of the City of Prague (UDI Praha)

Contact person: Ing. Vladimír Kadlec, Deputy director

Town: Prague 1, Czech Republic Postcode: 110 00

Street: Bolzanova 1

Telephone: +420 221 197 111 Fax: +420 224 211 380

Mobile: +420 724 324 453

E-mail: udi@udipraha.cz www. udipraha.cz

Main activities:

The Institute of Transportation Engineering of the City of Prague (UDI Praha) is a specialised organisation, the first of its kind in the Czech Republic, established in 1966. UDI Praha is concerned with engineering, design and consulting activities in the field of city transportation and traffic engineering, both for the City of Prague, and for other Prague and non-Prague customers.

Below are the main professional activities of UDI Praha:

- processing of all kinds of transportation and traffic engineering documentation
- creating transport solutions and traffic city planning
- setting of transportation engineering conditions and materials for planning and project documentation of constructions works
- proposing co-ordinated developments of city transportation system and solution of integrated public transport system
- processing of traffic surveys, investigation and analyses
- creating, operating and up-to-dating of transportation engineering data bank system
- proposing traffic condition improvements
- designing traffic organisation on street network
- projecting traffic calm, designing of residential street and pedestrian zones
- regulating and restrictive measures for motor car traffic and proposals for parking policy
- designing of traffic signal devices, co-ordinated control, centralised control and public transport priority on traffic signals
- developing traffic conditions, transportation constructions and measures from the environmental point of view
-

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Motorways of the sea (MoS) IP



EU co-ordination and promotion forum on intermodal passenger travel CA



Knowledge base for intermodal passenger travel STREP



Safe, secure, efficient and interoperable waterborne transport

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Road Safety strategies

Integrating Intelligent Transport Systems

Implementation of Transport Pricing

Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: KAROSA a.s. (stock company)

Contact person: Ing. Rudolf CERNY

Town: Vysoke Myto Postcode: 566 03

Street: Dobrovského 74

Telephone: +420 465 451100 Fax: +420 465 420748

Mobile:

E-mail: rudolf.cerny@karosa.iveco.cz www. karosa.cz

Main activities:

R&D, production and sales of busses and coaches.
The company's production programme includes a full range of buses from city buses through long-distance lines and tourist coaches.

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Design appropriate contractual relationships STREP

Company details:

Company: Koexpro Ostrava Stock Company

Contact person: Ing. Jaroslav Parenica, Ing. Milan Dvorak

Town: Ostrava - Vitkovice Postcode: 703 00

Street: U cementarny 1303/16

Telephone: +420 595782251 Fax: +420 596633923

Mobile:

E-mail: koexpro@koexpro.cz www. Koexpro.cz

Main activities:

Development, production and sale of technical resources and technology for high density mixtures transport.

Nondestructive lilliquidation of underground cavities intended for filling (power distribution, gas lines and downpipe).

Development of technology of citizen and landscape protection against flood effects (moving masses).

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Company details:

Company: KYBERTEC Ltd.

Contact person: Dipl. Ing. Oto Sladek

Town: Chrudim Postcode: 537 01

Street: Tovarni 1112

Telephone: +420 469 659 147 Fax: +420 469 659 147

Mobile:

E-mail: sladek@kybertec.com www. kybertec.com

Main activities:

Kybertec Ltd. is development organization and system integrator for information systems in the field of industry and traffic telematics.

Company works in the field of information system of traffic telematics such as:

- Simulation of air pollution in tunnels (worldwide unique product)
- Design of telematics information systems connecting of traffic sub-systems
- Creating of large web application providing information for operators and also for end web users
- Simulating SW of traffic processes
- Services of systems integration in telematic field

With universities cooperation offer also applications of advanced identification systems methods, modelling and artificial intelligence and Automation systems of industry control processes (Consultancy in the field of HW and SW for PLC, DCS , support for companies at the pilot projects with PLC, analyses, expertises and optimal setting of control processes, Distributed superstructured information systems for technology processes, complex supplies of equipment for automation independent studies and preprojects preparation, project documentation, supplies of control equipment of technological processes, research of control SW for PLC platform or for industrial PC systems platform, research of ergonomical SW for SCADA and superstructured systems, system checkout at the place of application, creating of users documentation in selected language, final version of project documentation, quality guarantee and post guarantee services.

Kybertec operates in are of Research and development. To this area can be add mentions about:

- cooperating with universities (Czech and abroad) and Czech Academy of Sciences on research projects

- ITS
- tunnel simulation techniques
- microclimate controlling
- artificial intelligence systems
- Hereditary systems
- Optimal control for solar objects
- etc.
- system identification (with special accent on latent dynamic systems)
 - identification we are able to provide at off-line mode
 - and on-line adaptation of parameters
- application of artificial intelligence methods for practice
 - fuzzy systems – we proposed Fuzzy PD regulator for using in the field of PLC, this regulator is reasonable as dynamic component to SW Merkur setting for programming of PLC systems
 - neuron nets – we implemented to the PLC systems setting, simple Neural Toolbox enabling formation of NN according to perceptronics paradigm
 - genetic and eugenic algorithms – we dispose with genetic and evolution algorithms for using in the industrial practise at for example nonlinear optimization, identification and other activities.

- advanced methods of microclimate controlling
 - protection of sights by monitoring, identification their characteristics and proposal of successive pro-active steps
 - microclimate controlling with utilize sorb isotherm ensuring unique possibility of protecting specific materials (wood, textiles, etc.)

Sustainable surface transport

1.6.2.1 'New technologies and concepts for all surface transport modes (road, rail and waterborne)'

CIVITAS Dissemination and Best Practice Transfer Action

1.6.2.2 Advanced design and production techniques

1.6.2.3 Re-balancing and integrating different transport modes

Interoperability of the European Railway System

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Implementation of Transport Pricing

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Design appropriate contractual relationships STREP

Company details:

Company: MECAS ESI Ltd.

Contact person: ANTONIN PRANTL

Town: Plzen Postcode: 326 00

Street: Uslavska 10

Telephone: +420 377 432 931 Fax: +420 377 432 930

Mobile:

E-mail: antonin.prantl@mecasesi.cz www. mecasesi.cz

Main activities:

- 3D numerical analysis, process simulation and optimization without building physical prototypes in the fields of virtual environment, virtual prototyping and virtual manufacturing
- consultancy and computational/development works for industry
 - crash test simulation, barrier and roll-over tests, passengers safety using PAM-CRASH and PAM-SAFE software
 - formability evaluation, die design, sheet material forming simulation using PAM-STAMP
 - thermoforming simulation of plastics and composites using PAM-FORM
 - analysis and optimization of casting processes incl. defects prediction and casting quality using ProCAST and PAM-QUIKCAST software
 - structural optimization by OptiStruct
 - noise and vibration prediction and analysis using AutoSEA
 - optimization of heat treatment and welding processes by SYSWELD software
 - analysis of internal and external aerodynamics using PAM-FLOW and multiphysics applications by CFD-ACE+

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Company details:

Company: Research Institute of Agricultural Engineering

Contact person: Ing. Otakar Syrový, CSc.

Town: Praha 6 - Ruzyne Postcode: 161 01

Street: Drnovska 507

Telephone: +420 233 022 277 Fax: +420 233 312 507

Mobile: +420 731 615 049

E-mail: otakar.syrový@vuzt.cz www. vuzt.cz

Main activities:

Transportation systems in agriculture, determination of exploitation, energy and economical indicators of transporting processes, planning, transportation management organization in agricultural enterprises.

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Vessel data management (Voyage data recorder, Electronic logbooks) STREP

1.6.2.4 Increasing road, rail and waterborne safety and avoiding traffic congestion**Road Safety strategies****Integrating Intelligent Transport Systems****Implementation of Transport Pricing**

Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: Research Institute of Building Materials (stock company)

Contact person: Ing. Jaroslava Ledererova, CSc. - director

Town: Brno Postcode: 617 00

Street: Hnevkovskeho 30/65

Telephone: +420 543 529 200 Fax: +420 543 216 029

Mobile:

E-mail: vustah@vustah.cz www: vustah.cz

Main activities:

Research, development and selected production realizations in the area of building materials, processing of different waste materials in production technologies of building materials. Accredited laboratories of silicate analytical chemistry, ecotoxicology, authorised radionuclides laboratory, test laboratories of composite materials and aggregates, special technological and test laboratories and basic research laboratories. As for area of sustainable development of surface transport we can contribute by:

- technology processing solution of ecologically evaluated suitable waste materials into screeding and constructional layers incl. recultivation materials for landscape,
- developed system of sound protection shields, absorptive and reflecting, on the base of glass-fibre reinforced concrete in cooperation with production company DAKO, Ltd. (we can also to secure their production and supplies).

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: Ricardo Prague Ltd.

Contact person: Vladimir Volak, Director

Town: Prague Postcode: 186 00

Street: Thamova 11

Telephone: +420 221 729 121 Fax: +420 221 729 195

Mobile: +420 724 351 622

E-mail: vladimir.volak@ricardo.com www. www.ricardo.com

Main activities:

- design of engines, transmissions and vehicles;
- software development, technical computations and simulation;
- control & electronics;
- development of engine testbeds

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: SATRA Ltd.

Contact person: Ing. Ludvik Sajtar

Town: Praha 2 – Nove Mesto Postcode: 120 00

Street: Sokolska 32

Telephone: +420 296 337 111 Fax: +420 296 337 100

Mobile:

E-mail: satra@satra.cz www. satra.cz

Main activities:

SATRA Ltd. offers complete design, pre-design, consultancy, engineering, and architectural services, from primary investment intention to final approval of the building, evaluation of test operation of civil, industrial and engineering constructions.

SATRA Ltd. currently takes a major part in preparing and executing constructions of the City Ring in the capital city, Prague. As the coordinator of the constructional and technological parts, the company took part in completion and gradual putting into operation of Strahov road tunnel. SATRA Ltd. was the designer of driven parts and technological equipment of Mrazovka tunnel. Currently, SATRA Ltd. is the coordinator of City Ring in section Myslbekova – Pelc-Tyrolka and a designer of Spejchar – Pelc-Tyrolka construction.

SATRA Ltd. has executed during its 10 years existence projects for domestic and foreign investors, state administration bodies as well as city administration authority.

We focus on active approach towards the client. Every project is carefully handled and we often do exceed our obligations given by the contract. Our services are as complete as possible underlining top quality of work.

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Company details:

Company: SKODA VYZKUM Ltd.

Contact person: Jan Sedlacek

Town: Plzen Postcode: 316 00

Street: Tylova 57

Telephone: +420 3781 32792 Fax: +420 3781 33889

Mobile:

E-mail: jan.sedlacek@skoda.cz www. skoda.cz/vyzkum

Main activities:

Accredited laboratories (fulfil CSN EN ISO/IEC 17025)

- Material testing - chemical and mechanical tests, metallography
- Tests of strength and fatigue life of structures (transport means etc.)
- Strength measurement
- Reduction of noise and vibration
- Electrotechnical testing lab

Materials and Mechanical Engineering Research

- Metallurgy
- Thermal spraying for production and renovation
- Computer modelling – FEM, MBS, crash and fatigue calculation
- Computer fluid dynamics

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: SUDOP PRAHA a.s. (stock company)

Contact person: Mr. Tomas Slavicek

Town: Prague Postcode: 130 80

Street: Olsanska 1a

Telephone: +420 267 095 304 Fax: +420 224 230 316

Mobile: +420 605 229 029

E-mail: slavicek@sudop.cz www. www.sudop.cz

Main activities:

SUDOP PRAHA a.s. is a design, consulting and engineering company specialising in the comprehensive resolution of transport infrastructure needs, in particular, railway structures, road and highway structures and urban transport systems. This company not only designs the overall technical solutions, including bridge, tunnel and engineering structures, communications and signalling systems, electrification and power supply but also resolves issues such as transport management and organisation, transport technology and rolling stock, workshops, logistics, pricing policy, the economics of transport and financing and the environmental impact of projects.

Other areas in which SUDOP PRAHA a.s. operates are the design of underground and industrial structures, utilities, telecommunications and energy. The activities of SUDOP PRAHA a.s. also include consulting services in the area of regional development, improvement of regional transport system and project financing.

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Improve infrastructure cost allocation methods STREP

Design appropriate contractual relationships STREP

Company details:

Company: SUDOP PRAHA a.s. (stock company)

Contact person: Frantisek Hep

Town: Praha Postcode: 130 80

Street: Olsanska 1a

Telephone: +420 267 094 804 Fax: +420 224 230 316

Mobile: +420 602 221 223

E-mail: hep@sudop.cz www. sudop.cz

Main activities:

SUDOP PRAHA a.s. is a design and engineering company specialising in complex solutions in the area of transport infrastructures, particularly railway, road and motorway construction and urban mass transit systems. In addition to designing complete technical solutions including bridges, tunnels and engineering structures, telecommunications and security systems, electrification and power supplies, the company also deals with issues concerning traffic management and organisation, traffic and rolling stock technologies, repair facilities, logistics, tariff policy, transport economy and financing and impact of structures on the environment. Other areas in which SUDOP PRAHA a.s. is active are designing housing and industrial buildings, utility lines, telecommunications and energy generation facilities. The company also provides consulting services focused on the issues related to the regional development, regional/urban transport commuter system and project financing.

SUDOP PRAHA a.s. provides a wide range of services, beginning from the Conceptual and Feasibility Studies to the Preliminary, Detailed and Executive Designs and Supervision of constructions. Company covers all aspects of a modern transport system, namely transportation planning, project management and staffing, finance and economics, operations, commercial issues, preliminary costs assessment, and tariffs.

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Company details:

Company: SVUM a.s (stock company)

Contact person: Ing. Jiri Krejcik, CSc.

Town: Praha 9 Postcode: 190 11

Street: Areal VU

Telephone: +420 222 726 559 Fax: +420 222 729 256

Mobile: +420 602 378 200

E-mail: krejci@svum.cz www. svum.cz

Main activities:

R&D company and Testing Center with accredited laboratories and special production. Metals, plastics and composites.

Accredited labs:

* strength lab: mechanical testing , low and high cycle fatigue testing, metalography, fracture toughness, crack growth propagation

* High temperature material lab: stress rupture and creep tests up to 1150°C

* Corrosion and heat resistant material lab: corrosion and high temperature oxidation tests up to 1200°C in air and modified atmosphere

Special production:

* Corrosion resistant coatings of PTFE, XYLAN DELTA MKS etc.

* METALOPLAST - self lubricating bearing foil and foils of PTFE

* piston rings and further parts of filled and unfilled fluoropolymers

* high performance permanent magnets ORMAKON for magnetic separators, sweepers, cleaning of pipelines etc.

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Company details:

Company: Technical University of Liberec, Department of Transport Machines

Contact person: Doc.Ing.Celestyn Scholz, Ph.D.

Town: Liberec 1 Postcode: 461 17

Street: Halkova 6

Telephone: +420 485 353 155 Fax: +420 485 353 139

Mobile:

E-mail: celestyn.scholz@vslib.cz www. fs.vslib.cz/ksd

Main activities:

University technical education of specialist for motor vehicles.
 Research, development and design the Internal Combustion Engines (ICE), especially of the gas-fuelled ICE and their accessories, special engineering measuring on the ICE, analysis of the combustion processes and other complicated actions in the engine by Visio scope recorder, analyses of thermodynamic problems in the ICE. Ecological parameters of the piston engines, alternative fuels and development of the gas vehicle engines (LPG, CNG, Hydrogen). Testing activity on the ICE, exhaust emissions.
 Transmission systems for energy transfer in a mobile machines for transport and power working machines (wheeled vehicles, wheeled loaders, lifting trucks).
 Strength and strain analyses of parts and bodies of engines and vehicles, new conception of engines and vehicles.
 Technical diagnostics, measurement and analysis of noise and vibration, vibrodiagnostic analysis on engines and motor vehicle: pilot laboratory workplace.

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Design appropriate contractual relationships STREP

Company details:

Company: **Transport Research Centre**

Contact person: **Ing. Vaclav FencI, CSc.**

Town: **Brno** Postcode: **636 00**

Street: **Lisenska 33a**

Telephone: **+420 548 423 711** Fax: **+420 548 423 712**

Mobile: **+420 724 027 355**

E-mail: **fencIv@cdv.cz** www. **cdv.cz**

Main activities:

Centrum dopravního výzkumu (CDV) / Transport Research Centre as the only state research institute under the responsibility of the Ministry of Transport provides scientific research and technological development activities in all transport fields. The areas of expertise cover: transport policy, transport economics, transport information database, GIS, transport forecasting and modelling, road construction and management, road transport, urban and public transport, air transport, rail transport, intermodal transport, cycling, transport and environment, transport safety, land use planning, transport psychology and sociology, telematics (ITS). CDV provides activities and services as follows: Transport information and data services, Public transport services studies, Environment impact assessment, Safety planning, accident analysis and safety measures, Traffic calming studies, Road marking and traffic signing projects, Planning and design of cyclist infrastructure, Training transport company drivers and managers, Organization of conferences and seminars, Standardization and harmonization with EU legislation, Driver's psychological testing, Transport technology transfer, Road construction and materials laboratory, Environmental laboratory

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Design appropriate contractual relationships STREP

Company details:

Company: UniControls

Contact person: Ivan BARTUNEK

Town: PRAHA Postcode: 100 00

Street: KRENICKA 2257

Telephone: +420 272011425 Fax: +420 27814475

Mobile: +420 724011925

E-mail: bartunek@unicontrols.cz www. unicontrols.cz

Main activities:

Research, development, production and services for transport and industrial control, communication, information and surveillance systems.

Long term experience in design of hardware and software systems, real time operating systems, fieldbus communication, distributed control systems, SCADA, programming in C/C++ , VHDL, simulation, UML, Use cases..

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Design appropriate contractual relationships STREP

Company details:

Company: University of Pardubice, Jan Perner Transport Faculty

Contact person: Prof. Karel Sotek - dean

Town: Pardubice Postcode: 532 10

Street: Studentska 95

Telephone: +420 466 036 509 Fax: +420 466 036 094

Mobile: -

E-mail: dekanat.dfjp@upce.cz www. www.upce.cz

Main activities:

- study programmes at bachelor, master and doctoral level
- science and research activities in the field of transport science

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Design appropriate contractual relationships STREP

Company details:

Company: Brno University of Technology, Institute of Electrotechnology

Contact person: Assoc. Prof. Dr. Miroslav Cenek, PhD

Town: Brno Postcode: 602 00

Street: Udolni 53

Telephone: +420 541 146 291 Fax: +420 541 146 147

Mobile: +420 724 055 510

E-mail: prosova@feec.vutbr.cz www.

Main activities:

We would like to offer your city delivery of electric and hybrid vehicles for individual and public transport, which are produced by Czech firms. It concerns electric folding scooter ROTOBIC in single-track and triple-track design, electric vehicle BETA determined for transport of persons and also of load and low-floor electric bus for city transport. At the same time we enclose an offer of delivery of hybrid vehicle MINIMOBIL combining drive by means of electric motor and combustion engine. At the same time we offer you a delivery of mobile equipment and stationary public stations produced by Czech firm EPRONA Ltd. Rokytnice nad Jizerou enabling fast charging of Ni-Cd accumulator batteries of French firm SAFT. At present time also hybrid vehicle BETA and low-floor bus are in development.

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Design appropriate contractual relationships STREP

Company details:

Company: USTAV SILNICNI A MESTSKE DOPRAVY a.s. (Institut of Road and Urban Transport Stock Company)

Contact person: Ing. Jan Zeman, chairman of the board of directors

Town: Prague 4 Postcode: 149 00

Street: Türkova 1001

Telephone: +420 267288332 Fax: +420 267915865

Mobile: +420 602467625

E-mail: info@usmd.cz www. www.usmd.cz

Main activities:

Relevant (selected) activities:

Passive safety testing and designing.

Tests of mass reconstructions of car types by using alternative drives (especially LPG and CNG). Emission tests pursuant to the European Economic Commission of mass approved types of vehicles with ignition engines. Measuring emissions of Diesel engines. Tests for the determination of fuel consumption of vehicles in operation, particularly as the background data for the financial authorities. Consultancy in the field of construction, equipment and testing of vehicles for transport of hazardous objects and wastes, including expert's assessment of vehicles equipped with tankers, trailers and cases as well as other vehicles for these types of transports.

Design of a mechanically transmitted gyropropulsion. (No existing free-wheeled vehicle for urban mass transport can compete with urban buses in a cost-effective way. Also the trolleybuses are less profitable, even on the busiest lines. In addition to it, they lack for bus flexibility. Electrobus with their heavy and slowly chargeable accumulators are almost as expensive as the fuel-cell buses, whose separate problem is the refueling of compressed or liquefied hydrogen.) The gyropropulsion doesn't have such problems, and it is also safe enough but not a modern system for power transmission from its flywheel to the driving axle is light, and certainly not cheap. We suggest a mechanical power transmission by using an IVT. When connected as a CVT, it will be used for flywheel charging at the terminal by an external three-phase electromotor 50 Hz. The higher-than-average requirement on transmitted power should be fulfilled by the suggested special solution of CVT with rigid friction members. Thanks to planetary configuration it has acceptable dimension and mass. The fact that the pressure forces don't load the bearings, together with the minimization of slip caused geometrically should ensure a high efficiency.

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