GUIDEBOOK FORUM THNS 2013

JEAN-FRANÇOIS JANIN:电车的历史

Tramways history

JEAN-FRANÇOIS JANIN is a graduate of ParisTech (Ecole Polytechnique in 1972, ENPC in 1974) and of the Institute for Political Sciences of Paris in 1974. He worked for the French Ministries for Environment, Industry and Transport in Paris and Clermont-Ferrand. He was also General Manager of the Chamber of Commerce of Lille for 10 years. As ITS task force manager since 2002, in the French Ministry of transport General Directorate for Infrastructures, Transport and Sea (DGITM) , he took a major role in the implementation of several ITS systems: smart cards in public transport, digital tachograph, automatic speed limits enforcement, national ITS architecture, multimodal travel information, tracking and tracing of dangerous goods…

He teaches ITS in ParisTech – ENPC, University Paris II, and ECE. He chairs Scientific Interest Group on ITS. He represents the French Ministry of Transport in ERTICO and is involved in several cooperation agreements (America, Japan and China).

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LECTURE

Tramways appear around 1850 in USA and France, as an improvement of “OMNIBUS”. It was not possible to transport more than 15 passengers in the horse powered carriages rolling on ordinary roads. The iron wheels on flat rails of the tramways where more efficient: the capacity was doubled. Tramways develop rapidly in French cities until 1930, with different kind of motorization, including pneumatic engines and electricity. During this period, automobiles were emerging with difficulties as an urban mode of transport.

Two elements explain the abandon of tramways before the second world war: the lobby of car industry and car drivers asking for more space on the streets of the cities and the better efficiency of auto-buses, because they did not need a specific infrastructure, were easier to operate and had higher commercial speed. In less than 10 years, almost of the networks were dismantled.

The development of private cars from 1950 to 1980 and the evolution of urbanization in favour of this mode of transport result in a deep crisis in urban transport. Among the measures taken to implement a more balanced policy was the reintroduction of tramways (Nantes 1984, Grenoble 1987) which were adopted with enthusiasm by inhabitants and electors. In 2015, 27 French

cities will operate 750 km of tramways. For the future, one must consider that guided vehicles, like tramways, have real advantages for transport with high level of service in the city centres because it needs narrower lanes for an higher capacity than normal buses.

摘要：

有轨系统在 1850 年前后首先出现在美国和法国，被用来改进“公共马车”。客运马车想要在普通的道路上运送多于 15 位乘客是不可能的。而行驶在有轨系统平坦的轨道上的铁制车轮则显得更高效：运能翻了一倍。有轨系统伴随着不同类型的机动化在 1930 年以前的法国城市快速发展，其中包括气压发动机和电力。而在这期间，机动车也随着如同城市交通模式这样的困难问题出现了。

最终在二战前，有轨系统遭到舍弃，因素有二：汽车工业的游说，以及汽车驾驶员对于在城市道路上占有更多空间和更高效的公共汽电车的诉求，这是由于这两种交通方式不需要独有的基础设施因而变得更容易驾驶并拥有更高的运营速度。于是在不到 10 年的时间里，几乎所有的轨道网络都遭到拆除。

1950 年到 1980 年，个体小汽车的发展和由这种交通方式支持的城市化进程导致了严重的城市交通危机。有轨系统作为实现更加平衡的交通政策的一种措施开始被重新引入（1984 年在南特，1987 年在格勒诺布尔），居民和选民也积极地采纳了这种方式。至 2015 年，27 个法国城市将运营 750 公里的轨道系统。将来，由于像有轨电车这样的自引导车辆比常规公交拥有更大的运能，然而所需占用的道路空间却更小，人们一定会因其高服务水平相信有轨系统将在城市中心区对交通大有裨益。

朱沪生：上海轨道交通基本网的回顾与思考

ZHU Husheng: Reviewing and Thinking of Shanghai Rail Transit Basic Networks

朱沪生，教授级高级工程师，申通集团前总裁。自 1984 年参与上海地铁公司的组建以来，先后担任过上海市地铁公司党委副书记、副总经理；上海地铁总公司副总经理；上海市地铁工程建设指挥部副指挥；上海市地铁总公司党委书记、副总经理；体制改革后，又先后担任上海地铁运营有限公司党委书记、董事长；上海地铁建设有限公司党委书记、董事长；上海申通地铁集团有限公司副总裁；上海申通地铁集团党委副书记、总裁等职务。 朱沪生同志曾主持过上海地铁轨道交通工程项目的指挥策划和管理协调，多次获得国家级、上海市级科技进步成果奖。

ZHU Husheng, professor level senior engineer, former president of Shanghai Shentong Metro Group Company. He has successively served as deputy party secretary and vice-general manager of Shanghai Metro Company, vice-general manager of Shanghai Metro Corporation, deputy commander of Shanghai Metro Construction Headquarter, party secretary and vice-general manager of Shanghai Metro Corporation since 1984. After the structural reform, he successively held the post of party secretary and president of Shanghai Metro Operation Co. LTD, party

secretary and president of Shanghai Metro Construction Co. LTD, vice president of Shanghai Shentong Metro Group Company, deputy party secretary and president of Shanghai Shentong Metro Group Company. He was in charge of the command, plan, management and coordination of the Shanghai Rail Transit Projects. He also won National Level and Shanghai Municipal Technology Progress Awards many times.

冯正民：台北市公共交通发展的回顾与展望

FENG Zhengmin: Retrospect and Prospect of Taipei Public Transportation Development

冯正民，台湾交通大学交通运输研究所教授，美国西北大学博士毕业，曾任交通大学交通运输研究所所长(1996.8~1999.7)。学术专长：1. 物流管理；2. 都市及区域规划分析；3. 运输政策分析；4. 交通运输规划与管理；5. 计划评估与决策分析

FENG Zhengmin, professor from Traffic Transportation Institute of National Chiao Tung University, Doctor of US Northwestern University, former director of Traffic Transportation Institute of National Chiao Tung University(1996.8~1999.7).

Academic specialties: 1. Logistics management; 2. Urban and regional planning analysis; 3. Transportation policy analysis; 4. Transportation planning and management; 5. Plan evaluation and decision-making analysis

孔令斌：城市、交通发展的阶段性与规划应对

KONG Lingbin: Stages and Planning Answers for Urban and Transportation Development

孔令斌，中国城市规划设计研究院副总工程师，在交通规划、交通改善及交通需求分析与计算机应用技术方面具有丰富理论知识和实践经验，曾负责长三角、珠三角、北京、成都、贵阳等多地的综合交通规划项目以及国家“863”科技研究项目，所负责项目曾获得全国优秀规划设计一等奖、建设部部级优秀勘察设计一等奖、建设部科技进步二等奖等多个奖项。

KONG Lingbin, deputy chief engineer of China Academy of City Planning and Design, has accumulated abundant theoretical knowledge and experiences in transportation planning, traffic improvement, transportation demand analysis and computer application technology. Prof. Kong was in charge of Comprehensive Transportation Planning Projects of Yangtze River Delta, Pearl River Delta, Beijing, Chengdu, Guiyang and so on, he also took charge of 863 National Science and

Technology Research Projects. The projects he was responsible for have won many awards such as First Prize of National Excellent Planning and Design, First Prize of Ministry of Construction Excellent Survey and Design Service, Second Prize of Ministry of Construction Science and Technology Development.

MARC GUIGON:各交通方式间联运售票的互补：以欧洲为例

Intermodality for ticketing

MARC GUIGON, Senior Advisor, Passenger Transport, UIC.

Since June 2012, Marc has the responsibility for the Telematics applications for passengers in UIC Head Quarters. He is project leader for MERITS (timetables), PRIFIS (Tariffs and fares) and other Telematics projects. He is also involved in the station management (International conference NextStation2013 in Moscow), commuter and regional transport and High Speed.
Prior to UIC, Marc was working for French Prime Minister, responsible for the French national policy of transport in the field of spatial planning: railways, roads, urban transports, airports, ports, waterways.
He has also been engaged in the economic development of a French Region: Champagne-Ardenne. Lastly, he was responsible of some governmental cooperations between France and China, especially with CELAP (China Executive Leadership Academy of Pudong: 浦东干部学院): Water policy, rural policy, agriculture, urbanism and transport.
Prior, Marc was in charge of railway freight strategy, rolling-stock maintenance and management within the SNCF and also carried out European projects of research in the field of railway transportation.
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LECTURE
Standardized coding is essential for exchanging data between any trading partners. It is important to uniquely identify locations, trains, companies and equipment so that railways may operate efficiently.
For instance, it is essential that locations be uniquely identified by machine-readable coding in order for different systems to understand them. These unique locations are used for timetabling, pricing and fare structures, ticketing, controlling, and post trip processes. They must be interpreted by all parties in the same way – whether they

are railways, ticket distributors, air companies, bus companies or customers.
In order to exchange data, not only is standardized coding necessary to avoid misinterpretation, but messaging standards need to be developed so that carriers can exchange the information in a machine-readable format.
Marc GUIGON provides 3 different examples of organizations in order to guarantee interoperability of ticketing:

- The Swiss public transport network has developed a common ticketing medium which can be used either on trains, boats or buses all around the country. This intermodal ticket is now in the way of modernization with new technologies based on refillable smartcards where the exact route will be charged,
- Intermodality between the two modes, air and rail, is also presented with the example of Belgian railways. This Air-Rail integration aims to strengthen the companies and to give a competitive advantage over non integrated air-rail products. So, Airlines and railway undertakings can sell combined products,
- The French railway undertaking, the SNCF, has also developed a code share agreement with Air companies in order to sell combined tickets including an international flight and High Speed train to the French regions. There are a lot of advantages for the client as quick check-in for the train, guarantee of Air-Rail transfers.

These examples show that interoperability for ticketing is mandatory to facilitate the use of public transport, but it needs a very strong involvement of each information systems of the companies.
It is the role of UIC (International Union of Railways) to provide international standards for railways.

摘要：

不同的交通方式（铁路、航空、城市交通）都有其各自发行（销售）票务的方法，每种方法都有其各自常用的技术，并由一些国际组织支持（国际铁路联盟、国际航空运输协会等）

为了响应欧盟建立通用票务发行体制的号召，各国都制定了创新的合作方案。这一做法旨在对各种可能的商业互补性，和不同交通方式的结合做一个总结：铁路和航空、铁路和城市交通、铁路和海上交通。

欧洲各国的案例（法国、瑞典、瑞士、比利时和丹麦）将帮助我们一览现今的交通状况。

杨颖：采用超级电容技术的轻轨列车无接触运行网

YANG Ying: LRV catenary-free operation with super capacitor technology

杨颖，南车株洲电力机车有限公司首席专家。

YANG Ying, Chief Engineer of CSR Zhuzhou Electronic Locomotive Co.,LTD.

THIERNO AW：法兰西岛大区快速列车铁路网的部属和区域动态——对其社会经济影响的回顾性评价

Deployment of Express Regional railway Network and territorial dynamics : a retrospective evaluation of the socio-economic effects.

With a PhD in Transportation (2010, LVMT - attached to Ecole des Ponts ParisTech, IFSTTAR and Université Paris-Est Marne-la-Vallée), **THIERNO AW** continued his specialization at Setec International's General Studies and Transport Economics department. He is particularly interested in the interactions between land use and transportation with systemic approaches mobilizing various models. His research focuses on suggesting eco-indicators which take into account the reciprocal effects of population and job localization and the performance of transport networks. Also, he is a teacher assistant at Ecole des Ponts ParisTech and Paris Est University in MASYT (Methods of Territory Analysis), TRADD (Transportation and Sustainable development), and STFG (Railway Transport Systems).

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2010 - PhD Transportation ; Université Paris Est - Ecole des Ponts ParisTech - France
Research Team at LVMT: Networks Economics and Supply-Demand Modeling
2004 - Ms., Transportation and Land Use; UPE-MLV-France
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LECTURE

The Paris RER has been developed based on the guidelines set out in the master plan designed in the early sixties and implemented during forty years later, in the concomitant context of rapid development of road infrastructure and automobility. Urban development has continued throughout the region during this period, the RER has facilitated urban sprawl, while allowing the reinforcement of specific regional polarities and new towns.

The first part of this article focuses on an analysis of policies - since the first Master Plan in 1965 - in a metropolitan context that advocated a polycentric urban development (i). The second part studies the effects of Paris Region express transit network on urbanization during the same period (ii). The third part observes the mobility patterns according to the residential location and presence of a train station nearby (iii). Finally, from this retrospective analysis, we draw conclusions on understanding the impact of public policies on land use and transportation (iv)

摘要：

巴黎大区快线是在由 60 年代初起草的总体规划里制定的大方向的基础上发展起来的，在随后的 40 年中，道路和交通基础设施飞速发展。在这样的背景下，巴黎大区快速铁路网逐渐成形。在此期间，城市发展在法国各大区稳步进行，大区快速铁路网不但为城市发展提供了便利，同时也加强和巩固了诸如巴黎、拉德芳斯和其他新型城市所组成的两级区域方案。

演讲的第一部分就领土整治政策进行了分析。分析的内容从 1965 年第一部总体规划案开始，以多中心为主要方向的城市发展为背景(i). 第二部分研究的是自 1968 年以来建立在城市化领土基础上的公共交通网络所带来的影响(ii). 第三部分关注的是根据不同的居住位置居民出行的情况，以及周边的停车状况(iii). 最后，通过回顾分析，我们将在交通和土地的使用政策对公共政治产生的影响这一问题上产生新的认识和理解(iv).

陈道兴：铁路与城市轨道交通安全系统

CHEN Daoxing: Safety System of Railway and Urban Mass Transit

陈道兴博士，加拿大运输安全局铁道动力学高级工程师专家，英国机械工程师学会《铁路与捷运期刊 JRRT》、《工程制造期刊 JEM》和国际车辆系统动力学协会《车辆系统动力学 VSD》特约审稿人，美国机械工程师协会（ASME）会员。共完成 110 余篇中英文研究报告朱和学术论文。曾获得加拿大政府十年优秀服务奖，中国铁道科技进步二等奖，茅以升北京青年科技奖，铁科院十佳青年奖，中国土木工程学会计算机应用学会优秀论文奖等。

Dr.CHEN Daoxing is a senior engineer and expert in railway dynamics of Transportation Safety Board of Canada and a member of American Institute of Mechanical Engineers(ASME), he is also an invited reviewer for many academic journals such as *Journal of Railway and Mass Rapid Transit JRRT* of Institution of Mechanical Engineer (IMechE), *Journal of Engineering Manufacture JEM* and *Vehicle System dynamics VSD* of International Association for Vehicle System Dynamics (IAVSD). Prof. Chen has cumulative completed more than 110 research reports and academic papers.

Awards and honors: the Government of Canada Ten Years Outstanding Service Award, Second Prize of Science and Technology Development of the China Railway, MAO Yisheng Beijing Youth Science and Technology Awards, Top-notch Youth Award of China Academy of Railway Sciences, Excellent Paper Award of China Civil Engineering and Computer Application Society, etc.

Cristiana MAZZONI & FAN Lang(樊朗): 高速时代的斯特拉斯堡：为创意而放慢节奏

Strasbourg in the era of high speed: a metropolis that slows down to be creative

CRISTIANA MAZZONI is an Architect and Urban planner, Professor of Urban design and PhD director in the Ecole Nationale Supérieure d'Architecture of Strasbourg (ENSAS). She is Director of the research laboratory "Architecture, Morphology/Morphogenesis and Project" (AMUP EA 79309 - French Ministry of Culture). Actually, she coordinates two important researches for the French Ministry of Environment (MEDDE) and the French Ministry of Culture and Communication (MCC) on the topic of mobility, railways and railway stations, and on the topic of metropolitan regions patterns. She is the French Director and Scientific responsible of the Sino-French Double Master in Urbanism and Architecture (ENSAS-Tongji University). Email : cristianamazzoni@gmail.com

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2007-2010 Architect AADI (Alsace Architecture Design Institute),office manager of AADI in China, project manager of Alsace house (2010 Shanghai world expo)

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LECTURE

In our researches about urban strategies in **Strasbourg** (cf. POPSU/MEDDE program 2011-2013), we underlined the specificity of the collective transportation projects in this important **cross-border conurbation**. We underlined the integration of the Science Pillar (University) and the Civil Society Pillar as actors in the territorial and metropolitan project, linked to an interesting **bottom up approach** (cf. Upper Rhine Conference). This approach takes into consideration geographical, cultural, political,

social and economic particularities and allows better coordination of technical and sensitive data, according to the idea of a creative territory. The examples which describe this specificities are the projects of the urban **tram-way** and of the suburban **tram-train**. Those examples introduce two forms of slow movement in the conurbation, which responds to contemporary lifestyle changes. The project of railway stations has a new important role in this crossing movement of high-speediness and slowness in person mobility.

摘要 ：

从我们对斯特拉斯堡这个城市的战略观察开始（请参照我们在2011至2013年的POPSU和MEDDE研究），我们突出了这个跨越国境线的大城市的交通项目中的多个特点（与参与者的复杂游戏有关）：

1. 将“科学支柱”和“民间社会支柱”的融入领土项目的参与者中，用自下向上的方法（请参阅莱茵大会）。

2. 这个对领土的政治、地理和社会特征均十分敏感的方法，偏向于技术数据和敏感数据的结合，紧随创造性领土发展的思想。

3. 解释这些特殊性的最好例子是：在推出有轨电车的过程，以及与有轨火车相关的项目。这两种交通方式在大城市范围内引入了两种慢速的出行方式，以适应城市居民生活的演变。 在这种高速和相对慢速相交叉的系统中，火车站将扮演一个新的重要角色。

郭小碚（主持人）：全球环境基金中国城市交通项目专场

GUO Xiaobei(Moderator): Special Topic-GEF China Urban Transportation Projects

郭小碚，现任国家发展和改革委员会综合运输研究所所长、研究员。长期从事综合运输研究工作，参加过多项国家或政府委托的重要研究项目。现担任中国系统工程学会交通运输系统工程专业委员会，以及中国交通运输协会、中国投资协会、中国道路交通安全协会等理事。主要研究领域包括：交通运输发展战略和运输系统发展政策、规划及组织管理；集装箱运输和多式联运；交通运输业改革等。

GUO Xiaobei, is director and researcher of National Development and Reform Commission Institute of Comprehensive Transportation. His main research domain: Comprehensive transportation development problems including the strategy, plan and policy of traffic and transportation development; Container multimodal transport which is focus on transportation organization and management problems.

刘丽亚：全球环境基金（GEF）中国城市交通项目发展评述

LIU Liya: ***Introduction and Review of Global Environment Facility (GEF) China Urban Transportation Project***

刘丽亚，国家发展与改革委员会综合运输研究所办公室主任，可持续城市交通专家，世行咨询顾问，“国家发改委/全球环境基金/世界银行”中国城市交通战略合作伙伴关系示范性项目办执行主任。

LIU Liya, office director of National Development and Reform Commission Institute of Comprehensive Transportation, she is also the executive director of ‘ National Development and Reform Commission/ Global Environment Facility/ World Bank ’ China Urban Transportation Strategic Cooperative Partners Pilot Demonstration Project.

张学孔（分项主持）：长治、重庆、乌鲁木齐——公交一体化

S.K. Jason Chang(Moderator)): ***Changzhi, Chongqing, Urumchi :Integration of public transportation***

张学孔，台湾大学土木工程学系暨研究所教授

S.K. Jason Chang, Professor, Department of Civil Engineering, National Taiwan University.

徐康明（分项主持）：郑州、乌鲁木齐——快速公交系统（BRT）发展经验

Prof. XV Kangming(Moderator): ***Zhengzhou, Urumchi :Experiences of BRT***

徐康明，美国 3E 交通系统咨询公司专家/创始人

XV Kangming is an expert and founder of 3E Traffic System Consulting Company of the United States.

陆化普（分项主持）： 沈阳——有轨电车的发展与运营管理模式

LU Huapu(Moderator): *Shenyang :Development and Management Model of Tram*

陆化普，清华大学土木工程系教授，清华大学交通研究所所长。

LU Huapu, professor, Department of Civil Engineering, Tsinghua University; Director, Transportation Institute of Tshinghua University.

张学孔：发展中城市推动交通需求管理之策略和挑战

S.K. Jason Chang : TDM Strategies and Challenges in Developing Cities

张学孔，台湾大学土木工程学系暨研究所教授、先进公共运输研究中心主任，美国马里兰大学运输工程博士，学术专长：交通运输政策、公共交通规划和与运营管理、交通经济、智能公共交通、电子收费与票证系统。张教授现为台北市政府、新北市政府顾问，曾任交通部科技顾问兼科技顾问室主任、台北市都市设计与土地开发审议委员会、台北市都市更新审议委员会、新北市都市计划审议委员会员会和高雄市都市计划审议委员会委员。张教授与全球的许多国际组织都有密切的合作并受邀担任顾问，例如全球环境基金 GEF 在中国和印度的城市永续交通计划就聘请张教授担任顾问和审议委员，他也是德国 GIZ、亚洲开发银行 ADB 和东盟 ASEAN 永续都市交通培训计划特约专家，对于城市永续发展和交通规划与实践有丰富的经验。张教授致力于永续交通发展研究多年，曾多次受邀于国际重要会议中担任主题讲座，并带领研究团队积极从事公共交通导向城市发展和智能交通相关规划与技术之研发。他的绿色交通理念: BBMW_Bike+ Bus+ Metro+ Walk 已经普遍获得国际的认同和肯定。

Prof. S.K. Jason Chang is a professor of Department of Civil Engineering and director of Advanced Public Transport Research Center in National Taiwan University. He is also an Advisor of Taipei City Government and New Taipei City Government. Dedicating to sustainable transport development for more than 20 years, Prof. Chang continues leading his research team working to change our cities toward Public Transport Oriented Development (TOD) in Taiwan, China and other countries around the world. Prof. Chang has been invited as an advisor on sustainable transport policy for many NGOs and city governments. Prof. Chang's green transportation theory BBMW (Integration of Bike, Bus, Metro, and Walk) has been recognized as one of his contributions to international society.

Lecture

This speech presents features of urban transportation development in developing cities.

Strategies of travel demand management (TDM) are proposed and discussed for these cities. The paper also identifies challenges for implementation of the TDM strategies in the developing cities while Key success factors are also analyzed.

本演讲首先讨论开发中城市的交通发展特性，并说明城市「交通需求管理」之内涵和推动策略；同时，对于落实政策所需面临的挑战亦予以讨论。最后，提出成功实践交通需求管理的重要因素。

杨东援：城市扩展过程中的综合交通体系建设

YANG Dongyuan: Comprehensive Transportation System Construction in the Process of City Expansion

杨东援，教授，前同济大学副校长、上海市交通工程学会副理事长、建设部交通工程技术中心副主任、同济大学分中心主任等职。长期从事城市交通规划、交通需求模型、智能交通系统、物流系统规划等方面的研究工作。

YANG Dongyuan, professor and former vice-president of Tongji University, vice chairman of Shanghai Institute of Transportation Engineering, vice director of Ministry of Construction Transportation Engineering Technology Center as well as the director of it's branch center in Tongji University. He has rich experience in urban transportation planning, traffic demand modeling, intelligent transportation system study and logistics system planning.

LUDOVIC WASSERMAN：为更优服务而设置的城市交通网络及便利设施的分析

Urban transportation network and facilities analysis for a better offer

LUDOVIC WASSERMAN is a project manager working at MOBIGIS. He worked f KONAXIS (Shanghai) and ADULLACT (Montreal) before this mission. He graduated from INSA(2013, Advanced master in business engineering and international affairs) and UTBM(2011,Engineering master's degree), and had one year exchange in UTSEUS in Shanghai(2011-2012).

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LECTURE

Following our numerous years of experience in the field of personal mobility, urban planning, GIS and our regular contacts with worldwide key actors in these fields, we developed the decision-making software to meet the challenges of sustainable mobility of people in urban areas.

The MobiGIS's solutions have been designed to meet the needs of

• Local governments, public transport authorities
• Town and urban planning agencies
• Operators of transport networks

MobiGIS's presentation will introduce a decision-making GIS software for mobility analysis and transport offers analysis to

• Model multimodal networks
• Plan and analyze transportation offers at urban and regional levels
• Simulate and compare travel scenarios, mobility policies, infrastructure projects
• Highlight decision-making criteria for multimodal network improvement

The presentation will be illustrated with real-world uses of MobiGIS's innovative GIS solutions.

摘要：

根据我们数年来个体交通领域的经验、城市规划、GIS 和我们与世界范围内这些领域的重要参与者之间的常规交流，我们为迎接市区居民可持续交通的挑战开发了这个决策制定软件。

MobiGIS 的解决方法的设计是为了满足以下需求：

- 当地政府、公共交通管理部门
- 城市、镇规划局
- 运输网络的运营方

关于 MobiGIS 的报告将介绍一款为机动性分析和交通供给分析制定决策的 GIS 软件，用以：

- 建立多模式网络模型
- 规划并分析城市和区域层面的交通供给
- 模拟并比较出行情景、交通政策、基础设施项目
- 强调为改善多模式网络而制定决策的标准

报告将以 MobiGIS 创新性 GIS 解决方案的真实案例来进行阐释。

周涛：山地城市的绿色交通发展探索------以重庆为例

ZHOU Tao: Green Transport Development Exploration of Mountainous Cities—Take Chongqing for Example

周涛，重庆市城市交通规划研究所副所长，重庆市规划委员会专家委员，重庆交通大学兼职教授。曾荣获全国优秀城乡规划设计一等奖、全国优秀工程勘察设计银奖、重庆市优秀城乡规划设计一等奖、重庆市优秀工程咨询成果一等奖等奖项；出版专著 1 本，发表专业论文 20 余篇；参与和主持编制国家和地方规范 4 部。

ZHOU Tao, deputy director of Chongqing Institute of Urban Transportation Planning, expert of Chongqing Municipal Planning Committee, part-time professor of Chongqing Jiaotong University. He has won many awards including the First Prize for National Excellent Urban and Rural Planning Design, the Silver Award for National Excellent Project Survey and Design, the First Prize for Chongqing Municipal Excellent Urban and Rural Planning Design and the First Prize for Chongqing Municipal Excellent Projects Consultation Achievement, etc. He has published a monograph and more than 20 professional papers. There were 4 national and local regulations that he took part in.

陈长虹&黄成：上海市交通港航清洁空气行动计划

CHEN Changhong & HUANG Cheng: Air Cleaning Action Plan for Shanghai Transportation Ports and Waterway

陈长虹，上海市环境科学研究院副总工程师，大气研究所所长，主要从事能源环境、大气污染控制战略和大气环境规划等研究，曾主持承担与完成多项世界银行、上海市科学技术委员会及中国国家环境保护局、上海市环境保护局、美国能源基金会、壳牌基金会资课题，多次获得上海市科学技术进步奖和上海市政府决策咨询成果奖；他同时还担任《能源研究与信息》及《能源技术》杂志编委。

CHEN Changhong is a deputy chief engineer of Shanghai Environmental Science Research Institute and the director of Atmospheric Research Center. He is mainly engaged in the study of energy environment, air pollution control strategy and atmospheric environment planning, etc. he has played a important role in many projects related to the World Bank, Shanghai Municipal Science and Technology Commission and China Ministry of Environmental Protection, Shanghai Environmental Protection Bureau, US Energy Foundation and so on. Chen has won Shanghai Science and Technology Progress Award and Policy-making Consulting Award of Shanghai Municipal Government many times. He also holds the post of editorial board member of *Energy Research and Information* as well as *Energy Technology*.

黄成，上海市环境科学研究院工程师，主要从事城市交通出行方式和机动车污染控制研究。参与了《上海清洁能源替代与低碳发展战略框架研究》、《上海机动车行驶工况研究》、《上海市交通可持续发展指标体系》研究项目。

HUANG Cheng is an engineer of Shanghai Environmental Science Research Institute. He is mainly engaged in the study of the trip mode of urban traffic and motor vehicle pollution control. Huang has participated in following projects: the Framework Study Project for Shanghai Clean Energy Replacement and Low Carbon Development Strategy, the Driving Cycle Study Project of Motor Vehicle in Shanghai and the Indicator System Study Project of Shanghai Traffic Sustainable Development.

陆锡明：城市绿色交通战略

LU Ximing: Urban Green Transportation Strategies

陆锡明，教授，上海交通运输和物流研究中心主任、中国城市交通规划学会副理事长、原上海市城市综合交通规划研究所所长；曾两次主持编制上海市综合交通规划，主持上海交通政策研究。获得国家科技一等奖一个，省部级奖十余个，出版专著《客运规划与城市发展》，发表中英文专业论文 60 余篇。

LU Ximing is a professor, the director of Shanghai Transportation and Logistics Research Center, a vice president of China Urban Traffic Planning Society and the former director of Shanghai Urban Comprehensive Transportation Planning Research Institute. He was in charge of the establishment of Shanghai Comprehensive Transportation Planning twice and responsible for the Study of Shanghai Transportation Policies. He has won a national technology first class reward and scores of Provincial and ministerial-level awards. He has published the monograph *Passenger Transportation Planning and Urban Development*, as well as more than 60 professional papers.

刘凯声：路线搜索高级模型及其在巴黎地区多式联运交通网络的应用

Kaisheng LIU: Modelling hyperpath and its application in the multimodal transit network of Paris region.

KAISHENG LIU, *hold a M.Sc. of Tongji University and a Ph.D of Ecole des Ponts ParisTech in Transport Modelling,* is the founder and President of AFCDUD (Association Franco-Chinoise du Développement Urbain Durable) founded in 2008. It is a nonprofit association which aims to create and promote a platform of exchange

and cooperation between France and China on the urban sustainable development issues: making the city more sustainable and more harmonious in the fields of Transport, Environment, Energy, Eco and Smart City ...it has been bringing together more and more bicultural and professional talents in these fields and making contributions to the Sino-French cooperations.
He is actually System Design Manager in ALSTOM for Transport Global Solutions, transport systems design and R&D project technical management. He gained the Innovation Awards 2011 of ALSTOM Group - "I NOVE YOU". He has worked at RATP as research officer from 2005 to 2008.
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LECTURE

In a large scale public transportation network such as the Paris region transit network, with all kinds of transit modes and numerous transit lines, supporting 25 million trips per day, 26 milliards passengers kilometers per year, to select an ad hoc and efficient path choice model is quite important. This study is to introduce the advanced path choice modeling: hyperpath modelling and the application in the multimodal transit network of Paris region. An extended model with the consideration of the Quality of service (the cost of inconfort) will be also presented.

摘要：

在大巴黎地区公交系统这种大尺度公共交通网络中，由于各种类的公交方式和很多条公交线路要共同分担每天 2500 万次出行、周转每年 260 亿客位公里，专门和高效的路径选择模型显得尤为重要。本研究正是为了介绍这种先进的路径选择模型的建立：超路径模型的建立及其在大巴黎地区多模式公交系统中的应用。同时也将介绍考量服务质量的扩展模型。

施勇：上海交通港航行业节能减排机制与政策探讨

SHI Yong: Energy Conservation and Emission Reduction Mechanisms and Policies Discussion of Shanghai Transportation Ports and Waterway Industry

施勇，上海市交通港航发展研究中心主任。

SHI Yong is the director of Shanghai Transportation Ports and Waterway Development Research Center.

Robert SARFATI：欧洲铁路基础设施和服务的一体化经验反馈

Feedback from the European integration of railway infrastructure and services.

ROBERT SARFATI, Fellow IRSE, is a graduate Engineer in Signalling and Telecommunications.
Today, as SYSTRA's Vice-President for Technologies and Services for Mobility, he is in charge of Intelligent Transport Systems and Telecommunications and involved in several implementation projects in Europe and worldwide.

Robert Sarfati is the Chairman of the UIC ERTMS/GSM-R Operators Group since 2000, in charge of ensuring interoperability of networks and future developments. He is involved in the whole process of standardisation of GSM-R and ETCS interface at the European level.
Robert Sarfati is the Chairman Technical Committee for Rail Telecommunications of the European Telecommunications Standard Institute in charge of railway telecommunications standardisation process.
Since 1973 he has been involved in telecommunication systems development for major companies such as THOMSON-CSF, TRT, PHILIPS, and ALCATEL with particular attention for mobile telephony, digital transmission, and multi-media applications.
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LECTURE

How European Rail Infrastructure and services integration impact Quality and Safety of Rail transport?

- The challenges of integration of Rail systems with specific experience and existing high level of Service performance but with various operation rules.
- The European construction of the Open Rail in Europe through the Rail Directives
- Integration of the Rail system through common technical and operational objectives.
- Integration of the Rail system through common Safety objectives and of User's needs satisfaction.
- Improvement in the governance of the European Rail System through Organisations and Strategic development Steering.
- Improvement in the governance of the European Rail System through standardization and research
- Achievement, return of experience and future plans.

摘要：

欧洲铁路基础设施和服务的一体化经验反馈。对铁路交通质量和安全的影响。

1. 地区一体化和全球化的背景促进各交通系统的一体化，这些交通系统有着各自的历史以及服务延续性和较高安全水平保证的约束。欧洲铁路基础设施和服务的一体化是一个有代表性的案例。

2. 历史背景：

19 世纪：各个欧洲铁路系统是世界上最古老的铁路系统，均在各自国家的范围内，依照逻辑、专业技能和国家工业水平得以发展。

20 世纪下半叶：欧共体建设铁路系统，旨在实现成员国家之间的一体化和合作。

指令：1991 年（欧共体的铁路）/1996 年（高速铁路的协同运营）/2001 年（规则的协同运营）/2007 年（安全的协同运营）

规章：2004 年（欧洲铁路协会 ERA 的创立）

3.重要问题：

领土一体化和地区经济的表现

欧洲标准的定义，改善全球表现，减少地区隔阂

对使用者需求的满足

4.管理机制：

政策：欧盟委员会/交通总署（DG MOVE）

政治（成员国）/技术（系统负责人）界面：RISC/欧洲铁路协会（ERA）

SERGE CRIDLIG：面向可持续的机动：运输网络的层次结构及交换通畅性

Towards sustainable mobility: Hierarchy in transportation networks and fluidity of exchanges

SERGE CRIDLIG first gained an experience in railway operation as operational manager of SNCF operating centers. Then he joined the Keolis group to run a urban transport network. Moving on to Germany for the next four years he developed the railway and bus activities of the group and re-organized newly acquired transport networks. Then he had the opportunity to experience a major project – the East Europe TGV. Under this project, he managed the production of the domestic and international services in both the design and the deployment phases. Serge Cridlig was then responsible for promoting the expertise of SNCF Group in the Asia-Pacific region, and now especially in China where he leads new development projects for Keolis.

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LECTURE

The presentation focuses on the way transport networks should be organised in hierarchical network structures to better adapt to the mobility needs, reduce travel costs and optimize infrastructure investments.

Intermodal transportation is based on the quality of connections between transport modes, but not only: passengers should be offered door-to-door transport solutions through a good access quality to the networks, integrated fares as well as intermodal

information.

Transfers between transport modes and services should be seamless, setting new standards for the design of transfer nodes. We will give as example Wuhan Tianhe transportation hub project, and how this integrated transportation platform should be a showcase for intermodal nodes in big Chinese cities.

摘要：

本报告聚焦于道路交通系统应该组织在分级的网络结构中以更好地适应机动性的需求、减少出行成本并优化基础设施的投资。

换乘一般需基于交通方式间的联结质量，但也不仅如此：还应该通过到网络的高可达性、整合的票制以及换乘信息提供乘客门到门的交通解决方案。

交通方式和服务间的转换需要无缝衔接，并制订新的换乘节点设计标准。我们将以武汉天河交通枢纽项目为例，说明为何这个整合的交通平台应该成为中国大城市换乘节点的标杆。

潘海啸：城市步行空间整合设计

PAN Haixiao: Integrated Design of Urban Pedestrian Space

潘海啸，同济大学建筑与城市规划学院教授,博士生导师，上海市政府规划咨询专家、世界城市交通学会学术委员会委员。研究方向：城市土地使用与城市交通规划，大都市地区空间结构，低碳城市,城市空间战略模型，城市交通空间的管理和设计等。2005 年任法国 动态城市基金会中国教席负责人，中国-欧洲大学城市机动性与可持续发展联合设计竞赛中方负责人。2006 年担任中国-丹麦中国城市可持续发展联合设计中方协调人。2008 年被法国 CNAM 特聘为访问教授。

Prof. PAN Haixiao, doctoral supervisor from Architecture and Urban Planning College of Tongji University, consultancy expert of Shanghai Municipal Government Planning, academic committee member of World Urban Transportation Society. He was region head of IVM in China and was in charge of Sino-European College Joint Contest of City Mobility and Sustainability. In 2006, he became the Chinese coordinator of Sino-Danish City Sustainable Development Design in China. In 2008, he was invited to be a visiting professor by CNAM, France. Prof. Pan has participated in transportation planning projects in many cities including Foshan, Urumqi, Jiangmen, Shaoguan and Changsha.

Recent researches: GAMUT Australian Research Center--Research on Transportation System Model of Shanghai; National Natural Science Foundation of China--Theories and Methods: Urban Road and Transportation Planning under Information Environment; US Energy Foundation--Strategic research on low-carbon city development in China: Measures on sustainable urban planning; World Business Council for Sustainable Development program--Transportation and Sustainable Development; Shanghai Expo Transport Demand Management Framework.

Main research domain: city land use and urban transport planning, metropolis spatial structure, low-carbon city, city spatial strategic mode, city transport space management and design, etc.

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CHRISTOPHE SAROLI：拼车——发展潜力
CAR-POOLING,development potential

Engineering graduate of the ENTPE (National School for State public works), **CHRISTOPHE SAROLI** is Generalist engineer in the field of development planning, transports, construction and environment.
He is since July 2012 a new mobility services specialist in the sustainable mobility department of the CERTU, where he is among other subjects following car-pooling and car-sharing.
Before that he was in charge of the « industry and sustainable development » unit in the economic service of the French embassy in Italy. He was following the franco-italian issues, in a large range of thematics including transports, environment and industry.
He has also worked in the European Commission, in the « clean urban transport unit » of the energy and transport directorate. He was involved in the production of a european directive on the promotion of clean and energy efficient vehicles, and he followed closely urban mobility area.
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LECTURE

Car-pooling, a practice that started with the birth of the car industry and that, traditionally limited and marginal, has increased significantly over recent years. The development of car-pooling could solve many mobility problems in the current economic crisis both for individual and collective transportation.

This communication will first describe the caracteristics of carpooling as a mobility solution that can replace the individual use of a private car. It then will present the main paths towards boosting growth in car-pooling to turn it into a real, credible and cost-efficient travel solution both for users and the community.

As a complement to public transport and other mobility services car-pooling could then provide a real alternative to « solo car use ». This is particularly the case in low-density regions where public transportation at a reasonable cost is difficult to organise and where car-pooling can be an efficient substitute.

摘要：

拼车这种做法早在汽车行业产生之时就诞生了，传统地受到限制并被边缘化，然而近年来却大幅增加。在当前经济危机的形势下，无论对于个人交通还是公共交通而言，拼车的发展都可以解决很多交通问题。

本文将首先描述拼车的特征，它作为交通问题的一种解决方案，可以代替对私家车的个人使用。然后，会介绍促进拼车增长并将其变为一种对用户和社区来说真正的、可信的和有效的交通解决方案的主要途径。

作为公共交通和其他出行服务的一个补充部分，拼车可以提供“单独使用汽车”的替代品。特别是在低密度区域，以合理的成本很难组织公共交通，那么拼车就能成为一个有效的替代品。

ROGER LAMBERT:法国智能机动进展

News about smart mobility in France

ROGER LAMBERT is graduated as an engineer of the national public works school in 1982. He is a project coordinator on multimodal information and smart ticketing at the French Department of Transport.

Before he joined the Land Transport Directorate, he worked:
- At ANVAR-OSEO, the national innovation agency, in the area of transport
- At the county based infrastructure agency (Ministry of Transport) in the north-east of Paris for territorial projects and road network management
- At the Ministry of Industry in the area of energy

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LECTURE

Every year, on September 22nd, different countries use to organise a « car free day ». China participates in this worldwide event, which, in 2013, concerned 150 cities. The China Academy of Urban Planning and Design considered that this car free day should be an opportunity for exchanging best practice of French and Chinese Cities. For that aim, a document has been provided in French and in Chinese, which contains a set of sheets relative to specific mobility policies and describing the state of the art in cities strongly involved in sustainable mobility action.

1.Mobility policy topics:

Urban mobility planning;Traffic management, congestion, pollution
Urban Multimodal hubs and park and ride;Car sharing, car pooling
Biking and walking;Parking;Traveller information

2. Experiences : Best practice in French cities
Paris et région île de France ;Marseille et Euroméditerranée ;
Grand Lyon ;Lille Métropole ;Nice Côte d'Azur ;Toulouse Métropole
Agglomération de Bordeaux ;Agglomération de Strasbourg
Nantes Métropole ;Rennes et région Bretagne ;Grenoble Métropole

The presentation will give an overview of these different sheets and focus on most remarkable aspects.

摘要：

每年 9 月 22 日，不同国家都会组织"无车日"。中国也参与了这项世界性的活动，并且在 2013 年涉及 150 个中国城市。中国城市规划设计研究院认为今年无车日应是法国和中国城市间交流最佳实践的契机。为此，我们准备了法语和汉语的一系列文件，涉及法国一般交通政策以及各个法国城市交通实践的最新情况。

1．一般交通政策话题:

城市交通规划，交通管理、拥堵、污染，多模式城市中心与停车换乘
租车和拼车，自行车和步行，停车，出行者信息

2、法国各个城市的最佳实践

巴黎和巴黎大区、马赛、里昂、里尔、尼斯、图卢兹、波尔多、
斯特拉斯堡、南特、雷恩和布列塔尼大区、格勒诺布尔

报告将会讲述以上诸多文件的概要，并聚焦其关键点。

QIJIE ZHANG：高分辨 3D 系统：展现巴黎交通空气污染的预测和现状

A very high-resolution 3D traffic-induced air pollution forecast and nowcast system for Paris.

QIJIE ZHANG (R&D Engineer at ARIA Technologies), Engineer in Risk Management and Environment from Ecole des Mines d'Alès, and PhD in Atmospheric chemistry and environmental physics from Univ. Paris Diderot, France, Post-doc at Inter-university Laboratory of Atmospheric System (CNRS-LISA, France). Working in the field of atmospheric models (emissions, deposition, meteorology, dispersion, photochemistry), he has contributed to the development of several applications of a regional chemistry-transport model (CHIMERE) and its operational applications in Paris, Beijing and New Delhi. Now, he is in charge of collaborations with China and is the project manager of an international innovation project about online heavy metal supervision at ARIA technologies, where he works also on air pollution management issues related to transport, mobility and sustainable cities.

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LECTURE

The AIRCITY Project, http://www.aria.fr/projets/aircity/, funded by the EU through the FEDER mechanism, was designed to build an innovative numerical simulation tool to modeling the dispersion of traffic-induced air pollution at the urban micro- scale for the purpose of air quality forecast and nowcast at a very high resolution of 3 meters for Paris.

Usually, micro-scale simulations of atmospheric dispersion are performed with complete CFD/LES codes, solving complete equations for the flow on very high-resolution meshes. The CPU demand of such calculations is very large, so that only small domains (about 1km) are simulated, in order to keep the execution time reasonable. In AIRCITY, the challenge is to run a high-resolution solver (3m cells) over the whole city of Paris, covering a 12x10km^2 domain. Real traffic data, such as GIS city-street data, traffic flux, vehicle information and etc. were online collected and simulated as input for air quality modeling.

摘要：

AIRCITY 项目（http://www.aria.fr/projets/aircity/）是欧盟通过 FEDER 机制创立的，为了以 3 米的高分辨率对巴黎的空气质量进行预报和即报，设计建构了创新的数字模拟工具，以建立城市微观尺度上交通导致的空气污染的离散模型。

通常，大气的离散微观模拟是用 CFD/LES 码来运行完成的，在非常高分辨率的栅格中解释完整的气流平衡。由于这样的运算所需的 CPU 是非常大型的，为了保持运算时间在适当范围内，所以只能模拟小范围（大约 1 公里）的情况。为整个巴黎城市覆盖 12x10 平方公里的范围运行高分辨率的解算器（以 3 米为单元）是 AIRCITY 项目的挑战。如基于 GIS 的城市街道数据、交通流、车辆信息等真实的交通数据都是通过网络收集并在空气质量模型的建立中模拟为输入变量。

CAROLINE MAURAND:开放数据和交通机动性网络管理

Open data and transport mobility network management

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Urba 2000 develops two departments : the first is in charge of Intelligent Transportation Systems (ITS) and the other one, in charge of a cooperation program between France and China on sustainable urban development. Concerning ITS, Urba

2000 participates in the organization of PREDIM - Platform Research, Experimentation and Development of Innovation in Mobility - for the French Ministry of Transport and Urba 2000 organizes, for the French part, the sino-French sustainable development of urban transport systems Forum (THNS Forum).
Concerning the cooperation program with China, Urba 2000 participates in French cooperation program with the Greater Wuhan - Wuhan City Circle in Hubei (especially about the management of Lake Liangzi, the management of road traffic and about the development of a cargo hub around the airport).
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LECTURE

The ability to manage data (data collection, processing, exploitation, for the development of public management tools and traveler information systems) is essential for the management of the Transport mobility network in the future.

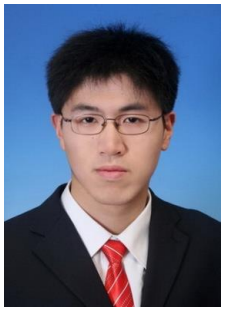
Public data (combining data from the public transport operators) are more and more available for the professionals and users community, this is the Open data movement. On the other side, Private data, produced by the users themselves, are growing exponentially. The objective is to build technical and public management policy and tools, to integrate these public data and private databases and to be able to offer a better Transport mobility network management.
The lecture presents the work in progress in France and Europe about the open data movement and gives some experimentations in France for an integration of public and private databases to improve a better system mobility and information to users.
摘要：

管理数据的能力（为了公共管理方法和出行信息系统的开发而进行的数据收集、处理、利用）是未来管理交通系统的必要条件。

公共数据（包括公共交通运营方的数据）对于专业人员和使用者群体来说越来越有用了，这就是数据开放运动。另一方面，使用者自身产生的个人数据正在以指数形式增加。建构专业的、公共的管理政策和方法，整合这些公共和个体数据的数据库，并且能够提供更好的交通系统管理，是目标所在。
演讲将呈现为了改善交通体系和为用户提供的信息，法国和欧洲在促进数据开放运动方面所做的工作以及提供一些法国整合公共和个体数据库的实验方法。

瞿琥隽：视频分析和数据处理在交通领域的应用

HUJUN QU:Applications of Video Analysis and Data Processing in Transport



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LECTURE

With rapid development of transport in infrastructure and information system, it needs more and more advanced functions to supervise, control and manipulate complex transport network. The core mission of these functions is to collect the right data and put the right processing method on it. It concerns varies technologies such as deployment of sensors, system architecture, signal processing, strategy definition etc. THALES has accumulated a lot of experience in these domains from our practice of projects around world. In this presentation, THALES would like to introduce some practical video processing and data processing technologies which can improve transport service quality and provide some interesting functions that we could never imagined before.

提要：随着交通基础设施和信息系统的飞速发展，复杂交通网络产生了越来越多的对于监控、控制和操控的复杂功能需求。而这些功能的核心任务在于收集合适的数据并在这些数据上施加合适的处理方法。这就涉及到诸如传感器部署、系统架构、信号处理、策略制定等等的众多技术。泰雷兹在世界各地的实际项目中积累了这方面的丰富经验。泰雷兹将介绍一些实用的视频处理以及数据处理的技术。这些技术能用来提高交通服务质量并提供一些前所未有的有趣的功能。