

## **Permanent Scientific and Technical Committee (PSTC) of CODATU**

### **Assessment of the PSTC Questionnaire**

#### **Draft report**

by

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### **I Introduction**

As indicated in its Concept Note, the Permanent Scientific and Technical Committee (PSTC) of CODATU assumes an advisory role to the Board, focusing on identifying critical issues in urban transport, as they emerge over time, for both research and practice, and facilitating both the transfer of research into applicable policy and the identification of policy-makers' research needs. The focus is of course on developing countries and emerging economies.

Through the geographically balanced membership of the PSTC we have started an active internal dialogue within the Committee. Our intention is to collate a summary of the key issues before we address the world transport community of researchers and policy makers in cities of the developing countries and emerging economies during the next CODATU conference to be held in Istanbul, 2 to 5 February, 2015.

This dialogue started with a questionnaire prepared by the Co-Presidents of the PSTC and distributed to its 20 members (excluding the co-presidents themselves) coming from 18 countries and covering both academic and professional backgrounds, a wide span of age groups and a diversity of experience. The questionnaire included three basic questions, some with sub-questions, reflecting on the key issues: identifying critical issues in urban transport for both research and practice; investigating ways to facilitate the transfer of research into applicable policy; and identifying policy-makers' research needs. The results of the questionnaire are intended to guide an active discussion during an Online meeting of the PSTC members in the autumn of 2014 to be followed by a full meeting in Istanbul in February 2015 and a special session in which the PSTC can address a wider audience of the attendees of CODATU conference from many countries and regions of the world and from academic and policy oriented background.

The questions and sub-questions are:

Q1.A: What are the major gaps between research and practice in the field of urban development, and urban mobility and transport?

Q1.B: What are the obstacles to this transfer?

Q1.C: Which are the most important themes on which practitioners need additional information?

Q1.D: How could research best assist in this?

Q2.A: What are the major barriers to a fruitful collaboration?

Q2.B: How could these barriers be overcome?

Q3: What are the prevailing critical issues of urban transport in our cities?

This report summarises the answers received to the above questions from sixteen of the members (a sample of 80%). We summarise the answers broadly in terms of numbers of responses, while categorising them by type of response where appropriate. Numbers of responses to each question are indicated in the text or shown in [--].

## II Summary of the Responses

### **Q1.A: What are the major gaps between research and practice in the field of urban development and urban mobility and transport?**

The most common response, from eight members, was that research results were not shared, and that decision-makers were unaware of them. Other responses went further by indicating why this might be: seven suggested that researchers were not involved in the decision-making process and four that researchers were not interested in the implementation of research results. Other insights included a gap between the educational level of researchers and decision-makers [2]; lack of awareness of decision-makers' needs [1]; reluctance of practitioners to use theoretical approaches [2]; researchers providing inconclusive results [1]; decision-making being largely a matter of common sense [2]; incompatible time frames for research and policy [2]; the dominant influence of lobbies and industry on decision-makers [2]; and the lack of feedback from decision-makers to researchers [1]. Other specific comments are listed below:

- Lack of feedback from practice
- Lack of reliable quantitative data
- Lack of substantial investigation of practitioner / decision makers needs
- Gap between educational levels of professionals in university and public/private sector
- Researchers do not provide conclusive tools and algorithms

### **Q1.B: What are the obstacles to this transfer?**

The dominant barrier, cited by ten respondents, was lack of political will, funding and structures to facilitate collaboration between researchers and decision-makers. A further six mentioned lack of communication and common interest between the two groups. Among the other more

specific answers the points raised included: lack of access to research results (including language barriers) [4]; tendency of research to focus on general rather than context-specific research [4]; lack of legislation requiring enhanced decision-making and lack of a competent decision-making structure [3]; inconsistent timetables for research and decision-making (2 – but also raised in Q1A); research being predominantly conducted in developed countries, with little consideration of transferability [2]; inability of researchers to promote their results; lack of finance to implement results. Other specific Comments are listed below:

- Past failures in implementation of research outcomes
- Lack of financing of capital-intensive solutions based on research results
- Research developed mainly in developed countries
- Research isolates and separates subjects to study them instead of taking into account their interdependence
- Researchers don't know how to use media to influence practitioners
- Lack of competent structure for decision-making

**Q1.C: Which are the most important themes on which practitioners need additional information?**

There was a wide range of responses to this question which, for this question, are listed in the order in which they arise in the planning process. Some dealt with the policy formulation process; these included need for a long term vision [1]; defining sustainability and related indicators [5]; effective collection and use of data, including household-based data and tools for measuring transport system performance [6]; understanding of context and searching for context-specific solutions [2]; use of simpler less data-dependent models [1]. Some considered specific policy measures or sets of measures; these included transport oriented development [4]; transport demand management [4]; congestion reduction; promotion of alternative modes; urban taxation; motorcycle mobility; environmentally acceptable road development; public transport management and integration with rural transport. A few related to the use of research results, provision of evidence on best practice to make decision-makers more comfortable with research outputs and cost analysis of pilot projects [4]. Other specific Comments are listed below:

- Cost analysis of pilot programs
- Congestion reduction
- Transport demand management
- Right to the city, right to mobility
- Promotion of alternative modes
- Household-based travel analysis
- Provide best practice or evidence for research results
- Effective collection and use of data to plan mobility and develop policies
- Utility of research results
- Transport policies and PT management

- Concept of sustainability and associated indicators
- Balance road infrastructure development with preservation of environment and quality of life
- Use of research « evidences »
- Need for long-terms vision and perspectives
- Needs for continuous coordination and common projects
- Understanding of different contexts and search for suitable solutions (avoid generic answers)
- Rural and suburban transports
- Adoption of simpler models asking for few datas
- Instruments for urban taxation
- Accessibility and motorbike mobility in urban areas

#### **Q1.D How could research best assist in this?**

Again, several types of answer were offered. Some related to the initiation of research, including understanding the needs of practitioners and the risks that they face [4]; developing collaborative projects between researchers and practitioners [4]; involving practitioners and industrialists in research design [3]; demonstrating the value of financing research. Some concerned the methods to be adopted, including searching for international good practice [3]; use of big data [3]; combining fundamental and applied research methods [3]; basing research in developing countries [4]. A few related to specific research topics; typically these repeated answers to Q1C, but they also included a specific proposal for research into the effectiveness of decision-making. Finally, several dealt with the output from research projects, including ensuring disclosure of results [3]; organizing training sessions [2]; producing evidence-based recommendations; encouraging transfer of good practice [2]; developing interactive tools to disseminate results; and demonstrating the impact of research in real life. Other specific Comments are listed below:

- Researchers should understand the aim, needs and risks that practitioners recognize
- Employ activity-based methodology where possible
- Work on adaptation and transfer of good practices
- Show the impact of research of real-life
- Involve practitioners and industrials in designing research projects
- Demonstrate the impact of transit oriented development
- Ensure disclosure of results
- Develop of fundamental and applied research/Develop of recommendations
- Find different outlet to discuss results/Generate interactive tools

#### **Q2.A: What are the major barriers to a fruitful collaboration?**

In the main, the answers to this question reinforced those to Q1A and B. The principal barriers were seen as conflicting time commitments and priorities [6]; lack of mutual trust [6]; lack of communication and understanding [7]; and failure of researchers to answer to decision-makers'

needs [5]. Other barriers on the local government side included its bureaucratic nature [3]; the absence of a scientific approach [3]; influence of political change; and influence of lobby groups and industry. On the research side they included financial constraints [3]; imbalance in technical competence [2]; lack of an inter-disciplinary approach; and failure to capitalise on research results. Other specific Comments are listed below:

- Lack of communication
- Lack of mutual understanding
- Absence of scientific departments and profile in government/municipal bodies
- Financial constraints
- Researchers do not answer to decision makers needs
- Lack of incentives for researcher to improve their relationships with practitioners
- Decision makers dependence from markets
- Confinement of researchers in their disciplines
- Lack of capitalization of research results
- Researchers and decision makers do not trust each others
- Lack of common goals and endpoints

### **Q2.B: How could be these barriers overcome?**

A wide range of approaches was offered both for the development of research and for its dissemination. The principal ones related to the establishment of research programmes were developing partnerships and multi-actor approaches, including involving practitioners in research projects [10]; including the financing of research on public policy [4]; establishing common goals and timeframes [2]. In terms of dissemination the most common proposal was the establishment of networks and training workshops (including more effective use of the internet) [6], followed by better information for national and local decision-makers [3] and highlighting good practice [2]. More specific proposals included a transport observatory; a benchmarking programme; involving academics in decision-making; provision of free expert advice; publication of non-academic documents and success stories. Other specific Comments are listed below:

- Use of internet technologies to develop space for discussion
- Allow constructive criticism
- Launch a benchmarking with successful relationships between them, for example in the chemical and pharmaceutical industry, in aerospace, in food. This, in order to detect transposable practices to our field.
- Establish common goals and timeframes
- Highlight good-practicies
- Associate financing of public policies to research projects requirements/Installation of a mechanism to improve funding for applicative research (taxation, pilot-projects, implemented program)

- For critical issues, decision makers could confine studies to an analytic council prospective in order to obtain different scenarios
- Develop research that involve developed and developing countries
- Provide free experts advice to practitioners
- Demonstrating the huge advantage of proper planning through research models
- Publication of non-academic documents
- Include researchers in local projects and programs
- Put in place a Transport Observatory endowed with autonomous means and regrouping university academicians and former administrative workers of the transport sector
- Research in cities stories/experiences with transferable outcomes
- Develop partnerships/Greater cooperation
- Integrate competent researchers in exchanges between decision makers and field actors (committees, commissions,...)
- Develop networks, platforms, workshops and trainings involving both researchers and practitioners
- Generate specific programs for technological transfer that benefit both sides
- Substantial action of researchers on public officials is the key point to overcome the problem

### **Q3: What are the prevailing critical issues of urban transport in our cities?**

The dominant answer to this question was the need for a coordinated approach to policy formulation, including the development of Sustainable Urban Mobility Plans and integration with land use planning [13]. Specific problems associated with transport included environment [8]; congestion [3]; safety [3]; inequalities in access; and old vehicle fleets. Specific solutions on which more emphasis was needed included quality public transport [5]; controls on private transport [4]; paratransit [3]; integration of modes [2]; control of car parking; and improved last mile connectivity. There were relatively few comments on the decision-making process. These included poor governance and lack of citizen involvement [4]; absence of national policy; lack of political will; influence of the private car lobby [2]; and lack of awareness, expertise and understanding [3]. Other specific Comments are listed below:

- Policies coordination (town-planning and transport mainly, automobile oriented growth)
- Public transport financing
- Unorganized car-parking
- Last mile connectivity
- Lack of monitoring systems
- Paratransit
- Youth employment as an indicator to assess urban transport
- Capacity to offer stable and affordable services
- Old private vehicles fleets

- Inequalities in access
- Lack of political will to govern according to the next generation and not the next election.
- Lack of State policies on urban sustainable mobility
- Integration of transport systems
- Private car lobbies
- PT organization and operation is a "black box" for the authorities.

### III Discussion

The answers to the questions fall broadly into three interacting themes:

- How can researchers and practitioners work together more effectively to ensure that the right topics are researched and the most effective use is made of that research?
- What are the principal research needs?
- How can research results best be disseminated and applied?
- What are the critical issues related to transport in our cities

#### **How can researchers and practitioners work together more effectively?**

The concerns over lack of collaboration between researchers and practitioners are common also in the developed world, and several recent research projects have investigated ways in which the interests of researchers and decision-makers can be coordinated. Typical recommendations relate to the development of a learning culture in cities; the production of readily accessible and objective research results; the role of policy networks; and the use of case studies and sometimes small scale high quality consulting projects, to demonstrate the value of cooperation. To some extent the gulf between research and practice may be more rooted in the developed world, since both academic and governance structures exhibit considerable inertia. It may be that there is greater potential to encourage cooperation in cities of the developing countries, since academic policies, governance structures and policy skills are still evolving. However, a question that need to pragmatically approached is “how networking among those stakeholders can be established in developing countries; and practically communicate, cooperate and consolidate effort”? It may be that PSTC can assist by encouraging a “CODATU Initiative” of encouraging collaboration in selected cities (perhaps one in Africa, one in Asia and one in Latin America in which:

- a platform is to be established for researchers and practitioners to meet regularly to review policy needs in one area (here a learned CODATU representative can act as catalyst)
- researchers alert practitioners where research results are already available to help answer the policy need;
- researchers and practitioners jointly prepare a specification and seek funding when policy needs require new research;



- researchers and policy makers focus on practical means on how to transfer the results of such research directly into policy making.

The catalyst role of CODATU, guided by the PSTC, is valuable because in many developing countries existence of a non-profit learned external mediator is really needed to facilitate bringing researchers and practitioners around the table. Initiatives of this kind could help to reveal the reasons and overcome the barriers highlighted in many of the answers above of lack of dialogue, understanding and research relevance and the presence of CODATU in this endeavor is expected to bring international experience in similar countries in the discussion. Experience in the developed world suggests that such collaboration can be fostered by embedding a researcher in the decision-making body, and by involving practitioners directly in the conduct of research projects. It may be that CODATU could seek financial support to facilitate such direct collaboration. The answers above also suggest that the research projects which are developed in this way need to be applied and relevant to the context (without being simply a consultancy project), multi-disciplinary, multi-actor, and scheduled in a way which both achieved research results and contributes in a timely way to policy needs.

Were PSTC to be able to stimulate and support such an approach, there would be considerable merit in being able to report progress and disseminate experience to subsequent CODATU conferences. Indeed, there may even be an opportunity for the developed world (where as noted above there is greater inertia) to learn from the experiences of such initiatives.

### **What are the principal research needs?**

These are in the main research needs highlighted in the answers to Question 1.C and 3 . It is reassuring to see that in the main they correlate well with the research needs identified in other reviews.

The most frequently mentioned research need is for a better understanding of the approach to policy formulation. One way forward on this would be for PSTC to take currently available guidance, such as that produced in Europe for the development of Sustainable Urban Mobility Plans, and to assess critically its relevance to developing countries. In addition, the PSTC can support CODATU in publishing a CODATU Guidelines Manual; with the basics of sustainable urban transport that is supportive of sustainable urban development, related applications and barriers, and transferable lessons; benefiting from the experience on publishing related documents produced by international organization, e.g., UN HABITAT and others, but with a focus on practical ways of policy formulation and application. It may be that CODATU could seek financial support for the above mentioned activities and, ideally, for promotion of test applications of the resulting guidance. The PSTC can discuss possible linking between such activities and the CODATU Initiative mentioned above.

The second theme of responses was the better understanding of the problems faced in developing cities. This requires a more effective approach to monitoring (and perhaps benchmarking) and



to the critical interpretation of the data collected. Again this is an area in which there is extensive advice available, which might usefully be reviewed for its applicability in a few case study cities.

The third theme is the need to identify appropriate solutions, assess their potential and design them effectively to meet local needs. The issue relates both to specific solutions such as bus priority and their integration into packages with other transport measures and with other sectors such as land use. This theme of “option generation” is one with which the developed world has been concerned for some time. There are now option generation tools available in the developed world context, which could potentially be modified to provide more directly relevant guidance to developing cities.

Other themes which are reflected in a few responses, and also appear in developed world literature, include understanding how to make governance of urban transport more effective, understanding how to stimulate greater political commitment, how to involve stakeholders and citizens more directly in policy development, and how to marshal finances and use them effectively. Across all of these there is also the important question of the relative roles of external expert and local practitioner. These are research issues which require a different disciplinary approach, but may still merit further consideration by PSTC, benefiting from the wide and diversified experience of its members and the long practice of CODATU.

All of these themes are relevant to the process of policy development, and it may be that PSTC could identify a few case study cities which would be interested in exploring a number of them as part of the process of putting together a new transport plan.

### **How can research results best be disseminated and applied?**

This is a theme which can be pursued in parallel with the first two, while in due course it should enhance the outcomes of both of them. Several suggestions have been put forward in the answers: policy networks, training workshops, embedding researchers in the decision-making process, producing policy-relevant conclusions, making more effective use of the internet and developing interactive decision-support tools. Many of these are initiatives which CODATU itself can support, not least in its own conferences and training programmes. It may be that PTSC could review what is already available and suggest ways in which current facilities can be enhanced.

One key question which links dissemination to application is that of transferability. Research results generated in one location will only be relevant elsewhere if they can be shown to be transferable. This of course lies behind the fundamental concerns, reflected in some of the answers, with the assumption that developed country solutions can simply be applied in developing cities. There is a growing body of understanding on the principles of transferability,



and many of the specific research needs outlined above implicitly involve testing transferability. This is a theme on which PSTC could usefully offer further advice.

### **What are the critical issues related to transport in our cities?**

The critical issue that was most emphasized is the provision of environmentally sustainable transport. This demonstrates the difficulty to achieve sustainable transport and directs us to investigate the reasons and the barriers and how researchers can provide solutions. Perhaps, the PSTC has a role to play here through the suggested publication of a CODATU Guidelines Manual which should approach this issue. Other critical issue that appeared is the concern about the quality of public transport. The problem here is in the main the difficulty to arrive to a tradeoff between the need to freeze fare values and the ever increasing cost of operation. Another issue that prevailed is the growth of individual transport modes, governance and citizens' involvement. These are areas on which PSTC could focus to offer further advice, may be through a CODATU sponsored activity that focus on transfer of lessons and experience between developing countries and also to benefit from possible related experience in the developed world. Surprisingly, however, are the few responses on congestion and safety as critical issues. It is necessary, therefore, for the PSTC to investigate the reasons behind this and to direct the attention to the transport researchers and practitioners to the importance of addressing these two issues. This maybe can be done though round table meetings that CODATU can organize during its conferences and also in other conferences with the participation of PSTC.

### **IV Conclusions (points for PSTC discussion)**