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Feasibility study on city club

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Executive summary

The present report gives a brief account of the achievements of the CONDUITS city pool so far and investigates the feasibility of a self-funded benchmarking city club for traffic management and Intelligent Transport Systems (ITS), as initially intended in the CONDUITS project. It is acknowledged that the creation and operation of the city pool during the conduct of the project has been successful and that the city pool's input to the project has been invaluable. Also, it is found that there is great interest among the cities in continuing the work of CONDUITS and the activities of the city pool, and that the cities believe that they will benefit from those. However, it is realised that the initial plan of evolving the CONDUITS city pool to a self-funded benchmarking club is unlikely, mainly due to financial barriers, but also due to complementarity with other networks and working groups. It is hence proposed to integrate CONDUITS in the activities of the Polis network and seek for additional funding in order to ensure the conduct of its activities beyond the duration of the project. The report concludes with a number of exploitation options under four hypothetical funding scenarios.

1 The CONDUITS city pool today

1.1 Creation of the city pool

In the early phase of CONDUITS, a group of cities with an interest in Intelligent Transport Systems (ITS) and especially in benefits assessment was set up with two main aims: firstly, to shadow the project including the provision of input at key stages; and, secondly to test the ground for establishing a permanent forum ('city club') with a mission to work more intensively on ITS and traffic management in terms of exchanging experience and impacts assessment. This group of cities was named the CONDUITS city pool.

A call for cities to join the CONDUITS city pool was launched during the first months of the project. The call was circulated widely through the contacts and networks of the partners. To meet the international dimension that would need to be reflected in the work of CONDUITS, membership was extended to cities outside of Europe too. Admission to the city pool was initially conditional upon taking part in the survey on 'urban traffic management policies and technologies' in Work Package (WP) 1, whereby participating cities were invited to provide extensive data and information on their current practice and plans.

As anticipated, the city pool has grown progressively over the course of the project with the addition of new cities which have become aware of the project. As of March 2011, the city pool holds 39 members, including 34 cities from Europe and 5 cities from outside Europe (see Table 1, and Figure 1 and Figure 2). A success of the city pool formation is that the European part is a fairly diverse group, in which not only large metropolises are included (such as Paris, London, Rome, Istanbul and Athens), but also cities known for their virtuous attitude towards innovative transport systems (such as Trondheim, Karlsruhe and Turin), as well as medium-sized cities (Southampton and Stuttgart) and emerging realities (Kocaeli, Haifa, Funchal). The non-European part, on the other hand, consists of five world metropolises, and there is scope for expansion towards other continents, with cities in the USA, Canada, and Australia having been approached, but also India and South Africa.

City pool members are regularly informed about project progress, are encouraged to comment and provide input on the project's tasks, and are invited to attend the yearly CONDUITS workshop. The 1st CONDUITS workshop, which took place in Rome in May 2010,

was attended by the representatives of 16 cities. According to registrations for the 2nd CONDUITS workshop in Paris in March 2011, representatives from a similar number of cities are expected to attend. It is noteworthy that representatives from a number of cities that are not members of the city pool, such as Bilbao, Talinn and Toulouse, will attend the 2nd workshop and are expected to join the group. Also, it is interesting to mention that other local transport authorities (such are regions) have expressed interest but have not joined the pool due to eligibility constraints.

Table 1: CONDUITS city pool

<u>Europe</u>			<u>South America</u>	<u>Asia</u>
Ankara	Haifa	Sheffield	Belo Horizonte	Hong Kong
Athens	Istanbul	Southampton		Kaohsiung
Barcelona	Karlsruhe	Stockholm		Taipei
Berlin	Kayseri	Stuttgart		Tokyo
Bologna	Kocaeli	Tel Aviv		
Brescia	London	The Hague		
Brussels	Milan	Thessaloniki		
Bursa	Munich	Trondheim		
Dublin	Paris	Turin		
Edinburgh	Prague	Vienna		
Frankfurt	Rome	Zurich		
Funchal				



Figure 1: CONDUITS city pool (Europe)



Figure 2: CONDUITS city pool (non-Europe)

1.2 Achievements of the city pool

There is a regular exchange between the CONDUITS consortium and members of the city pool on various tasks of the project. However, the city pool members have been mobilised on several occasions for very concrete tasks as described below.

The traffic management survey

The first task that city pool members were invited to contribute to was the survey on traffic management policies and technologies in cities. The survey questionnaire covered several areas of traffic management, such as: general statistics of the transport systems, organisational structures, monitoring and forecasting, provision of traffic information and urban traffic control. Special focus was given to demand management, traffic control centres, public transport and parking. Cities were also given the opportunity to describe in more detail a specific policy or technology that they wished to demonstrate, as well as to state any other aspect of their traffic management strategy not covered by the questionnaire.

The extensive range of data and information required in the questionnaire meant that it could not be completed solely by one person. Several people had to be associated with the questionnaire, requiring a significant effort on the part of each city. The result of this exercise was a comprehensive overview of traffic management in cities in Europe (deliverable n° 1.2-1.3).

The 1st CONDUITS workshop in Rome

The first gathering of the CONDUITS partners and city pool members took place in Rome on 6-7 May 2010. The purpose of the workshop was firstly to present and gather feedback on the first set of achievements (mainly the preliminary findings of the traffic management survey) and secondly, to gather input and debate subsequent tasks within CONDUITS. Nearly half of the city pool members attended the workshop.

The dominant item on the first day was a presentation and discussion around the findings of WP 1 work. Cities expressed interest in this benchmarking activity but also highlighted the need for guidance on how to make improvements. During the second day, which was geared towards gathering input from the cities present on their future transport visions and ITS developments, it became clear that most cities share the goal of improving modal share for public transport and soft modes and the related objective of reducing emissions from transport. However, some cities are unwilling to penalise the car excessively for fear of driving businesses and residents away and therefore expect ITS to play a strong role in optimising the capacity of the road network. Barcelona, for instance, already enjoys a high public transport share for inner-city trips which it wishes to maintain and nurture; however, it has also set a target of increasing car occupancy from 1.2 to 1.4 by 2018.

Many cities confirmed the need to understand how ITS can help deliver on policy, since ITS is 'difficult to sell to politicians', especially at a time of public spending cuts. The economic situation is also redirecting the focus towards making the most of the existing (ITS) infrastructure rather than making new investments.

2nd CONDUITS workshop in Paris and final conference

A second gathering of the CONDUITS city pool members has been scheduled in Paris on 23-24 March 2011. During this meeting, the cities present will learn about the work to date on the definition of the ITS key performance indicators and their applications in the cities of Paris and Rome. There will also be room for discussion about ITS development perspectives drawing on ongoing research and development in the area of ITS.

The final results of CONDUITS will be presented at the CONDUITS final conference in June 2011. City pool members will be invited to this event, which will also be open to anyone interested in learning about the main outputs of CONDUITS.

2 The future of the city pool

2.1 The role and tasks of the city pool in the future

Continuing from its current form, the city pool is envisaged as a growing network of city transport authorities in future, dealing with the field of traffic management and ITS. While, however, in its current form, the CONDUITS city pool's purpose is to support and validate the outcomes of the CONDUITS project, the roles will be inversed in the future, with the continuation and implementation of the operations developed by CONDUITS supporting the cities' policies and decision-making processes. Depending on the funding available, members of the city pool could benefit from different levels of services offered. These could vary from simple networking events to the services of a permanent benchmarking city club.

Assuming that all the funding required will be available (see Section 3), members of the city pool will benefit from the continuation of the services currently offered by CONDUITS post-completion of the project. The main function of CONDUITS, thus, will be to conduct benchmarking by keeping the performance measuring framework up-to-date (reviewing Key Performance Indices – KPIs), extending it to further areas of traffic management and ITS (such as the management of assets) with the addition of new KPIs, and conducting case studies with the city pool members on a regular basis. It is expected that CONDUITS will offer the same standard of services that other benchmarking clubs are offering, such as the CoMET and Nova clubs for metros. City pool members will hence, primarily, be assisted in their decision-making by obtaining customised guidance issued by CONDUITS. This will enable the appropriate stakeholders to make informed choices about new investments and about how to make most efficient use of existing infrastructure.

The CONDUITS website will play a prominent role in the management and operation of the city pool. Being regularly updated, the website will be upgraded to be the main means of dissemination of information about CONDUITS activities. Bi-annual newsletters will continue to be issued and published on the website, along with reports documenting the continuous benchmarking process of CONDUITS.

In addition, members of the city pool will benefit from regular networking events, with an opportunity for cities to showcase their policies, technologies and practices to other cities,

and also to learn from their experiences. The city pool will thus act as a forum for the exchange of best practices in the field of traffic management and ITS. Such an initiative has proven very successful during the conduct of the CONDUITS project, given the number of cities supplying data and attending the workshops, the increasingly growing interest and the positive comments received so far.

A further important task of the CONDUITS city pool is expansion. Namely, an expansion strategy will be devised early on, after the completion of the CONDUITS project, which will specify the next steps needed so as to sign up further cities from Europe, but particularly cities from outside Europe. It is expected that the CONDUITS city pool will grow to a Europe-led world-wide benchmarking club for traffic management and ITS.

2.2 Deliberations on the feasibility of a permanent city club

From the outset, it was hoped that a permanent forum for cities (city club) would be an output of the CONDUITS project. It was envisaged that the city club would be a small subscription-based group, supported by researchers, who would exploit and develop further the tools coming out of CONDUITS and engage in in-depth knowledge transfer on ITS impacts and benefits. The subscriptions were intended to cover the cost of coordinating the club and undertaking the various tasks of the city club (described in the previous section).

A reflection on the desirability and viability of a permanent forum (city club) starting from the present city pool membership was undertaken during the first 18 months of CONDUITS. This reflection occurred within the consortium and through dialogue with city pool members. The main outcomes of this deliberation were the financial challenges of setting up and running a city club and the complementarities with existing networks.

The number of the CONDUITS city pool members testifies to the high level of interest in the work of the project. Cities are generally interested in being part of forums, which allow an intensive exchange of experience and transfer of know-how on selected topics. This is especially the case for ITS, where the lack of knowledge on the benefits and the absence of a common assessment framework for city authorities have been identified as barriers to deployment.

During the CONDUITS project, the city pool members have provided their time freely and generously, whereas the project has provided financial support for travelling to city pool meetings. It transpires that this travel reimbursement mechanism has been crucial in securing the attendance of the majority of city representatives at the meetings. The massive

cutbacks faced by the public sector across Europe (primarily due to the current economic and financial crisis) are making it very hard for city authority representatives to engage in networking activities, especially where meetings are abroad. This situation became clear during the preparation of the first city pool meeting in Rome in May 2010 and was confirmed upon discussion with city pool members during the meeting. Given the difficulties observed by cities in paying for travel to meetings, it is highly unlikely that they would be prepared to pay a fee for subscribing to a city club.

Beyond the funding challenge, the issue of complementarity with existing networks, such as Polis, has also been raised. Polis has an active working group addressing traffic management and ITS, which involves some of the CONDUITS city pool members. This provides an ideal platform for building up the city club, which could complement the activities of Polis, as shown in Figure 3. The Polis working group does not address ITS impacts assessment only but covers a wide range of ITS-related topics identified by its members. It does allow for the transfer of knowledge on selected ITS topics but it does not have the resources to undertake detailed case studies or the development and application of KPIs, for instance, which would be the purpose of a city club.

In summary, there is clearly room for an ITS city club focusing on ITS benefits assessment, in addition to the already existing Polis working group addressing broader traffic management and ITS matters. However, the financial implications of setting up a city club are a major barrier.

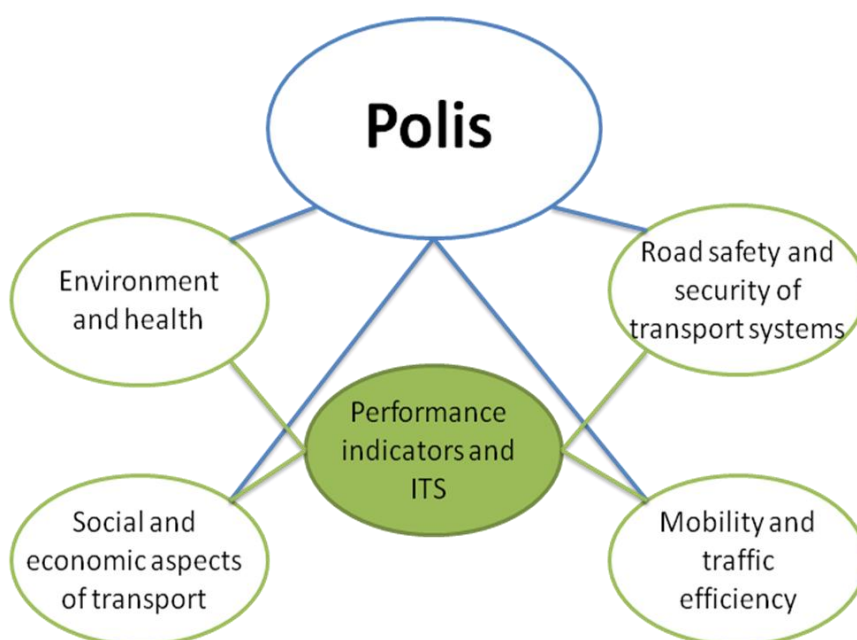


Figure 3: Structure of Polis with CONDUITS add-on service

2.3 Exploitation options

As funding is a critical issue for the continuation of the services offered by CONDUITS, options and potential sources will be explored throughout the remainder of the project. However, this report concludes with a number of scenarios of how the city pool can continue to operate under hypothetical funding situations. The assumption of the incorporation of CONDUITS in the Polis network is made, since it has been identified that this would be an appropriate solution.

No-funding scenario

In the absence of any funding, only minimal services will be offered to the CONDUITS city pool. Post-completion of the project, all material from the CONDUITS website will be transferred onto the Polis website, and the possibility of creating a dedicated section for CONDUITS will be considered. However, the website will not be updated with new information. The devised KPIs set will neither be reviewed, nor updated, nor expanded, and no case studies will be conducted on specific city pool members. The city pool will continue to exist as a group, and new members will accepted, though no efforts will be made to extend the group beyond Europe. It will be possible to organise a city pool meeting on a yearly basis, alongside the Polis conference, but participation primarily from Polis members and meeting invitees is to be expected. Overall, under the no-funding scenario the activities of the city pool will be reduced to solely networking.

Budget of €5,000 – €10,000 per year

Through the provision of a small yearly budget of €5,000 - €10,000 it will be possible to continue offering limited services from CONDUITS. Namely, it will be possible to conduct one case study per year (i.e. apply the KPIs set to one city) and produce reports and guidelines to the city concerned to assist their policies. However, it will not be possible to update the set of KPIs. Based on the outcomes of the case study, the CONDUITS website will be updated. Also, the organisation of an annual city pool meeting alongside the Polis conference will be supported, though it is expected that only Polis members and meeting invitees will be attending. Overall, under the provision of a small budget, it will be possible to continue some of the work of CONDUITS, only with respect to the application of the KPIs to further cities.

Budget of €10,000 – €20,000 per year

The provision of a medium yearly budget of €10,000 – €20,000 will enable the conduct of some more activities. Namely, it will enable the conduct of one case study per year, as in the lower budget scenario, but most importantly it will offer the possibility to partially review and update the KPIs regularly. The KPIs for one area of traffic management and ITS (one of traffic efficiency, traffic safety, pollution reduction, and social integration) will be reviewed each year, and the results, along with the results of the case study, will be published on the regularly updated CONDUITS website. A city pool meeting to update the members on the latest developments of CONDUITS will be organised once or twice per year. Overall, a medium budget will partly enable the conduct of the initially intended activities of CONDUITS post-completion of the project.

Higher budget

A higher budget will allow for the full handling of the intended CONDUITS activities with respect to keeping the KPIs set up-to-date for all areas of traffic management and ITS, as well as the conduct of up to three case studies per year. Also, it will enable to upgrade and maintain the website to ensure its role as an optimal dissemination tool for the activities of CONDUITS. The city pool will be meeting regularly during a six-monthly meeting, and it will also be possible to cover some of the expenses of the members' representatives.