

# BYPAD

*More quality for bicycle traffic*

*The most efficient method for improving your local cycling policy!*



**BYPAD**  
BICYCLE POLICY AUDIT

## Cycling, the European approach

*Total quality management in cycling policy.  
Results and lessons of the BYPAD-project.*

*EIE/05/016 – deliverable wp 6 - dissemination*

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## INTRODUCTION

In 1999 the European commission funded a project called BYPAD under the SAVE-programme. Aim of BYPAD was to develop a quality management tool which indicates the quality level of the cycling policy in cities and which prepares a quality plan/action plan for this cycling policy.

New in BYPAD was the introduction of Total Quality Management as a tool to improve cycling policy. Both organizational aspects as results of cycling policy in the field were examined and all relevant actors (users, officials and politicians) were actively involved in the evaluation process. The whole audit process was guided by an external auditor.

The first BYPAD-project was executed by Langzaam Verkeer (co-ordinator), fgm-AMOR, velo:consult and ECF (The European Cyclists' Federation). They developed the bicycle audit tool and tested it in 7 European cities: Gent, Birmingham, Zwolle, Grenoble, Ferrara, Troisdorf and Graz. Based on the successful implementation of the BYPAD tool in these cities a second BYPAD-goal became clear: spreading of the BYPAD-method in Europe and the exchange of cycling knowledge between cities and BYPAD-auditors.

Two successor EU-projects (BYPAD+ and BYPAD-platform) focused on both these aspects of spreading the tool, improving the tool (and widening it also for towns and regions) and exchanging cycling knowledge in Europe.

Within the last nine years BYPAD has created a pan-European network of around 100 cities, towns and regions in 21 European countries. 58 certified auditors were trained to supervise the audit process and the city networks POLIS, Energie-Cité and ICLEI were involved in dissemination activities.

Through BYPAD both a serious quality improvement tool and a strong network of cycling experts arized; and a platform for exchanging cycle knowledge and experiences between (cycling)cities/regions was founded. In the mean while BYPAD has become the quality standard for cycling policy. Different national and regional cycling strategies (e.g. Austria, Germany, Czech Republic, ...) are advising to use BYPAD as a quality management tool to improve the local cycling policy.

After these almost nine years of European support, BYPAD has become mature enough to stand on its own and to become a platform which wants to improve the quality of cycling policies and by this increasing cycle use and improving cycle safety by:

1. Implementing cycle audits in cities and regions
2. Exchanging cycling knowledge and expertise among members of the BYPAD-network (Auditors, cities, towns and regions).

From January 2009 a BYPAD-board will be created which is coordinating all central BYPAD-supporting activities. This means communication (website, newsletter, ...), training auditors, handing over BYPAD-certificates to cities/regions, organizing workshops, ... This BYPAD is formed by some of the core-partners of the BYPAD EU-projects: FGM-AMOR (Austria), Velo:Consult (Switzerland), TIMENCO (Belgium-The Netherlands), CDV (Czech Republic) and ECF. The financial basis for these central

activities will come from the membership fees of auditors and fees from cities/regions that are using BYPAD.

This publication wants to show where we are with cycling policy in Europe based on the experiences of the BYPAD-audits. We are looking for answers why there are such huge differences in cycle use between countries, regions and cities. What are influencing factors for having a high cycle use and how you succeed in changing the attitude towards cycling?

Are there differences in approach between countries (e.g. more emphasis on infrastructure in North European countries)? Can we speak about different phases in cycling policy and linked to these phases different packages of cycle measures?

A first part is giving the basic information on BYPAD and also compares BYPAD with other evaluation tools in Europe.

The second part focuses on the differences in cycle use and cycling policy in Europe and shows the results and conclusions of BYPAD. We will also introduce some BYPAD-cities with their city portrait and their experiences with BYPAD.

# 1 BYPAD: TOTAL QUALITY MANAGEMENT IN CYCLING POLICY

## 1.1 Total quality management and BYPAD

### 1.1.1 Auditing and benchmarking

For improving products or services of (big) companies, research institutes, governmental organisations there are all kinds of improvement processes based on sets of criteria and benchmarks who indicate the strengths or weaknesses of an organisation. We are speaking about audit schemes. By using the same audit scheme on a regular basis and in as much different organisation as possible there is growing a huge list of criteria who indicate if you are doing well or not. The best examples are the benchmarks.

The goal of BYPAD is the same. Defining quality standards by collecting information on all different aspects of cycling policy in a standardised manner. Based on experiences in many cities, regions, ... a set of quality standards is created. And this helps cities, regions to reset their ambitions and goals with regard to become a better cycling city.

Repeating the same audit process on a regular basis also indicated in which fields you are making progress and where you have to improve yourself. This way an audit is a perfect monitoring tool.

### 1.1.2 Total Quality management

Quality management is the unity of methods, techniques, procedures and systems an organisation is using to improve the quality of their products and services. Bringing in competent personnel, organising necessary education, evaluating the intern communication, having a good financial management are all parts of *quality management*. Each organisation is busy doing quality management up to a certain level, even without using the expression.

When *quality management* is applied systematically and general in an organisation by all persons concerned, we can speak about *Total Quality Management* or *TQM*. The international ISO norm 8402 defines TQM the following way:

*" A management approach of an organisation where quality improvement is the main goal and that is based on the participation of all employees. Aim is to book success in a long term thanks to satisfaction of the customers, advantages for the employees and the society. "*

Nowadays the system models, such as ISO and EFQM, catch on. These audits emphasise the total approach. Where formerly quality management was a separate and sometimes even an isolated event (e.g. improvement of financial system), the modern methods emphasise the integration with the policy and integration of the organisation.

An important difference between the above mentioned audit systems, ISO 9000 and EFQM, lies in the audit approach.

### **ISO-certificate (static quality control)**

In the ISO 9000-series the organisation has to comply with a specific list of standards. When all standards are achieved, the company is considered to be qualitative and receives an ISO 9000 certificate. Nowadays you won't find a large company without such an ISO certificate.

With this audit system an organisation has proved that the quality is assured on a specific moment. The ISO system means *quality assurance*. In the ISO system however the policy of an organisation is not considered as a dynamic process. The organisation doesn't see if there has been made progress in the quality of their products and services and what can be the evolution in the future. The ISO approach is a **static quality control system**.

### **EFQM-model (dynamic process)**

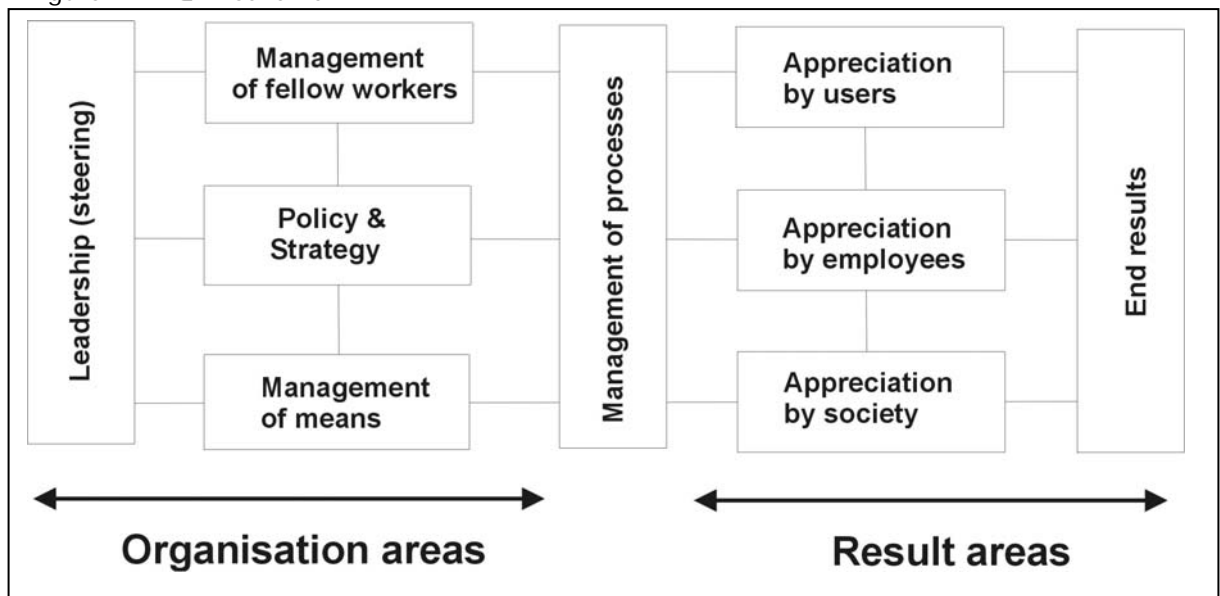
Contrary to the static quality control systems, where the existing quality is screened by means of fixed standards, the EFQM-model considers quality management as a dynamic process. Quality is never finished. On all levels there is a continuous quality evolution.

The EFQM-model is a European audit model for internal quality management. EFQM stands for European Foundation For Quality Management. Since the crisis at the end of the 80's this model has been accepted in the business world. The EFQM-model clearly stipulates that a policy is only successful if the clients (users), the employees, the management staff and the whole organisation are satisfied. The success factor is dependent on the total management process.

A characteristic of the EFQM-model is that it is a **self-evaluation model** where the managers, the employees and the users are actively involved.

In the EFQM-model there are nine points of attention. Five of these points describe the organisational aspects within the organisation. Four of these points describe the results of the management process in an organisation. There is coherence between the nine points of attention. Satisfaction by users and employees and a positive appreciation by the society will be reached through a goal-orientated leadership that gives content and direction to the policy and strategy of the organisation (bicycle policy), to the management of fellow workers, to the management of means and the management of processes, to end with good results (innovative bicycle measures).

Figure 1: EFQM- scheme



It are these characteristics which are also relevant for a quality management tool for cycling policy:

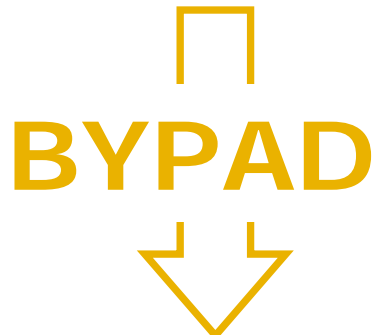
- The bicycle policy in a city or town is a dynamic process (e.g. the demands of users will always get higher)
- Having good results in cycling policy (high bicycle use, low bicycle accidents) is dependent on both organisational areas as results in the field (infrastructure, campaigns, ...)
- The evaluation of the bicycle policy should be done by the directly involved actors: the users, the officials/civil servants and the politicians. Such a self-evaluation process can be guided by an external auditor.

It are these preconditions which we found in the EFQM-model which is also the basis of the bicycle audit BYPAD.

## 1.2 BYPAD-method

BYPAD is based on the EFQM-approach which is transferred to the subject of (local) cycling policy. Through BYPAD, municipalities can initiate a process of continuous quality improvement. To achieve this, BYPAD combines cognitive, conversational and learning elements. The quantitative assessment of the individual aspects of cycling policy helps to convince the rationalists (cognitive element). Discussing the cycling policy within the evaluation group of decision makers, policy makers, executive staff and the user organisations ('clients') strengthens the political will to improve the quality of the cycling policy (conversational element). Assessing the cycling policy in a moderated process supervised by an external auditor, strengthens the effect of learning (learning element). Also the regional, international seminars and the good practice database strengthen the effect of learning.

**Total Quality Management:  
Normal in the business world**



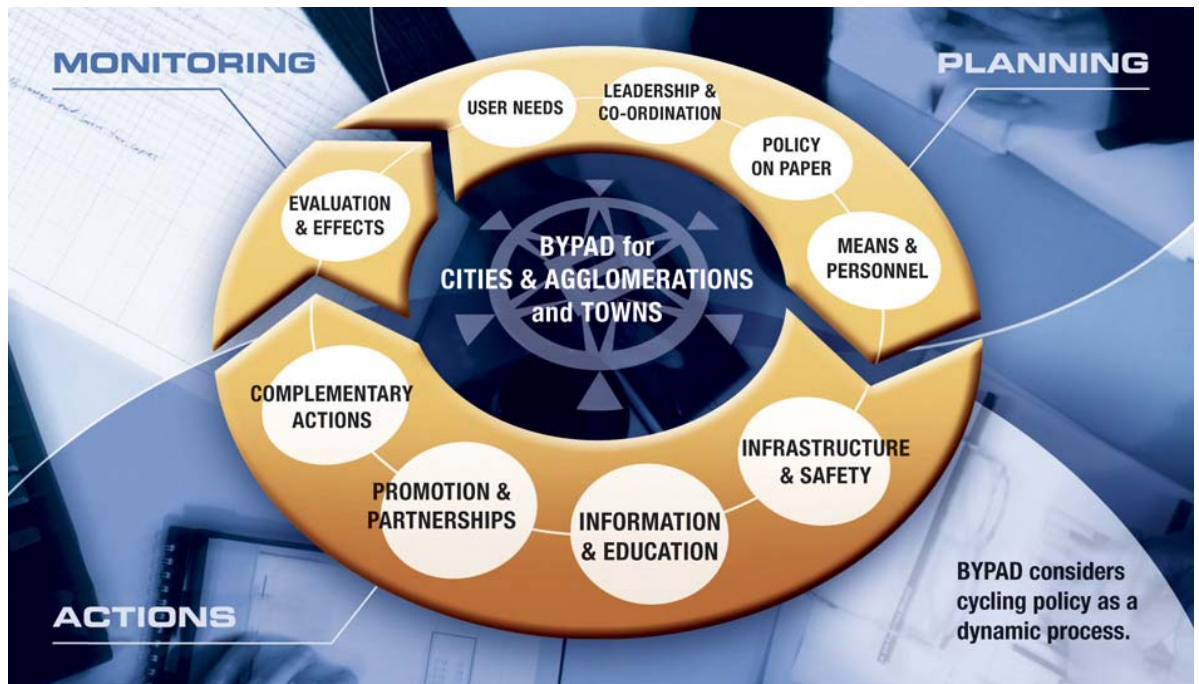
**Total Quality Management:  
Soon normal for cycling policy**

### **1.2.1 BYPAD a dynamic process**

BYPAD regards cycling policy as a dynamic process where different components need to fit together to be successful. BYPAD does not only scrutinise outcomes and effects of the local cycling policy, but also if and how this process is embedded in the political and administrative structures. Are there objectives for the cycling policy? Is the selected strategy adequate to achieve these objectives? Are the allocated resources in balance with the objectives, and is the continuity of financing safeguarded? Is cycling policy restricted to a few infrastructural measures or is the wide range of pro-cycling measures put into effect, including measures to discourage car use? Is there cross sectoral co-operation with strategic partners? How is safeguarded that the measures taken achieve the objectives strived for?

BYPAD distinguishes nine modules, whose qualities are determined separately (see Figure 2). For each module, a quality level is assigned on the BYPAD ladder of development which has four levels in total. The results of all nine modules altogether determine the overall quality level of the cycling policy. On the basis of the results for each module, the municipality can define quality objectives and derive measures separately for each module. Besides that, it is possible to monitor the evolution of the local cycling policy.

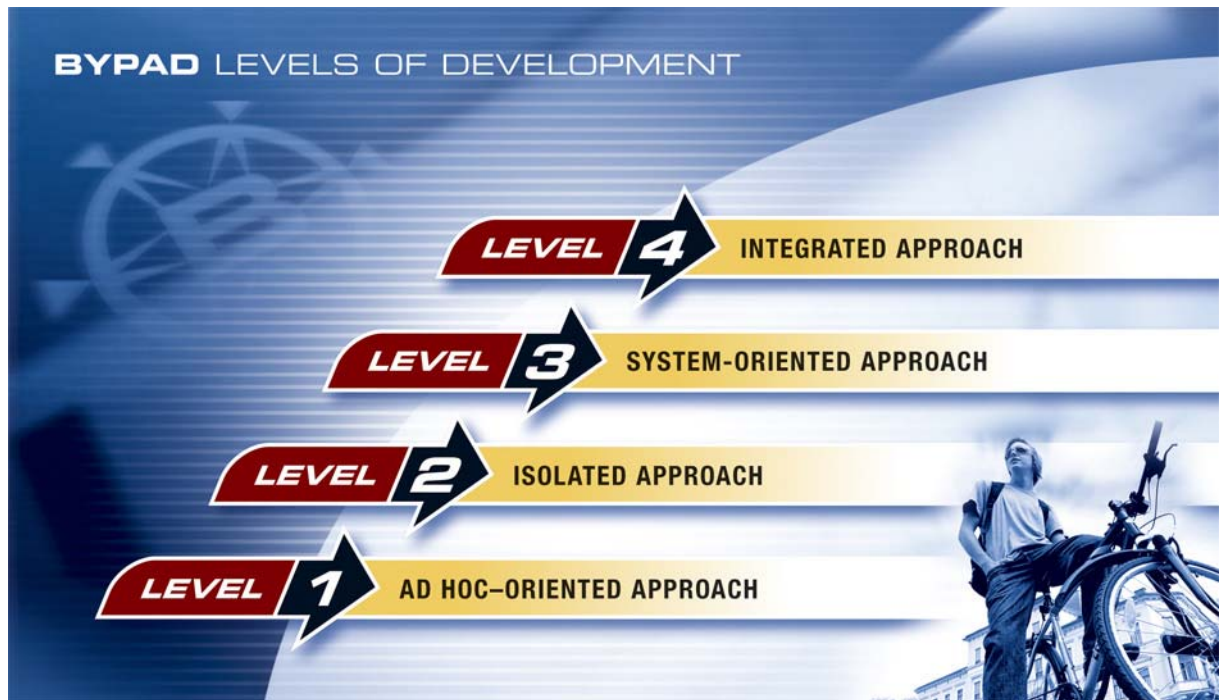
Figure 2: BYPAD modules



### 1.2.2 Ladders of development

The principal item of BYPAD is the questionnaire, which consists of 30/22/18 questions covering all aspects of cycling policy for cities/ towns/ regions. For each module, it contains a number of questions, whose answers are preset. They describe appropriate measures which have successfully been implemented in European cities. A quality level between 1 and 4 is assigned to each answer (see Figure 3). The quality level is zero, if no action is taken. BYPAD is kind of a mirror for the city's cycling policy. It detects the weakest link in the quality chain and shows where improvements are necessary and possible. By filling in the questionnaire the city (town, region) receives direct inspiration of what could be done for climbing up to the next quality level.

Figure 3: BYPAD ladder of development



The levels of development are:

#### **Level 1: Ad hoc oriented approach**

*Fire brigade principle:* Cycling policy is mainly limited to problem solving. Measures are mainly focussed on infrastructure or road safety at specific locations. Cycling policy is on a low quality level which is characterised by low and irregular budgets, few officials with low skills and without competence. Quality is a result of individual efforts only.

#### **Level 2: Isolated approach**

*Robinson Crusoe principle:* There is already a cycling policy, but it is neither integrated into the overall transport policy nor in other policy fields such as land use, health, environmental policy. Good infrastructure is the main concern of the policy, although some supplementary activities are undertaken. Cycling policy is characterised by some use of data and a limited knowledge of the users' needs, global agreements with a limited compulsory character, measures which are often counterproductive, because they are not tuned to the needs of other road users or not integrated into the objectives of other policy fields. Continuity isn't safeguarded.

#### **Level 3: System orientated approach**

*We are pulling into the same direction:* Cycling is regarded as a system, which is integrated into the overall mobility policy. The political will to support the cycling policy is underlined by a sophisticated local cycling strategy and appropriate budget allocation. The cycling policy comprises a wide range of different measures; different target groups are targeted with tailored measures, partly in co-operation with other

public and private partners. Cycling policy is based on good data and the knowledge of user needs, but still on a project basis with limited running time.

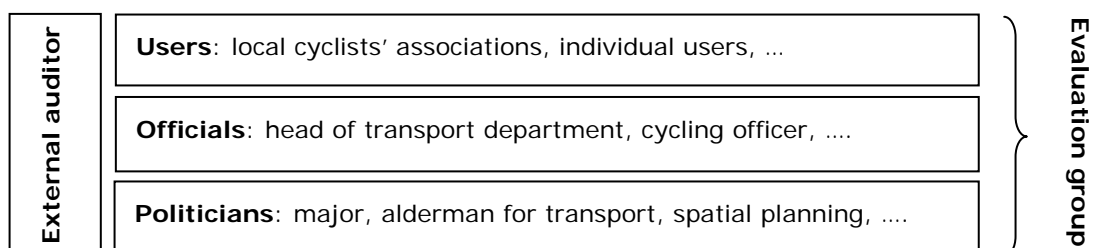
#### **Level 4: Integrated approach**

*The winning team:* Cycling policy is regarded as a permanent task with strong relationship to other policy fields. Measures to encourage cycle use are complemented by measures to discourage car use. There is strong political support, good leadership, regular budget allocation, enough skilled staff and comprehensive in-house expertise. Systematic networking and regular exchange of information, knowledge and experiences with internal and external actors help to raise and maintain the quality standard. The cycling policy is characterised by the availability of high quality data, regular monitoring and evaluation, strategic partnerships with the aim to win these partners over to allies who contribute their part to the local cycling policy.

#### **1.2.3 BYPAD evaluation group**

A key issue in the BYPAD approach is that the whole process of evaluation and quality improvement is carried out by a local evaluation group. This evaluation group consists of politicians responsible for cycling, policy makers and executive staff of the municipality dealing with cycling, and representatives of the local cyclists' user organisation(s), who use the 'product' of the local cycling policy. Bringing these three different players together, BYPAD assures that the local cycling policy is examined critically from different perspectives.

The evaluation group looks for strengths and weaknesses of the cycling policy in order to find jointly a consensus on fields where improvements are necessary and possible. The audit process is supervised by an external consultant, who is a certified BYPAD auditor.

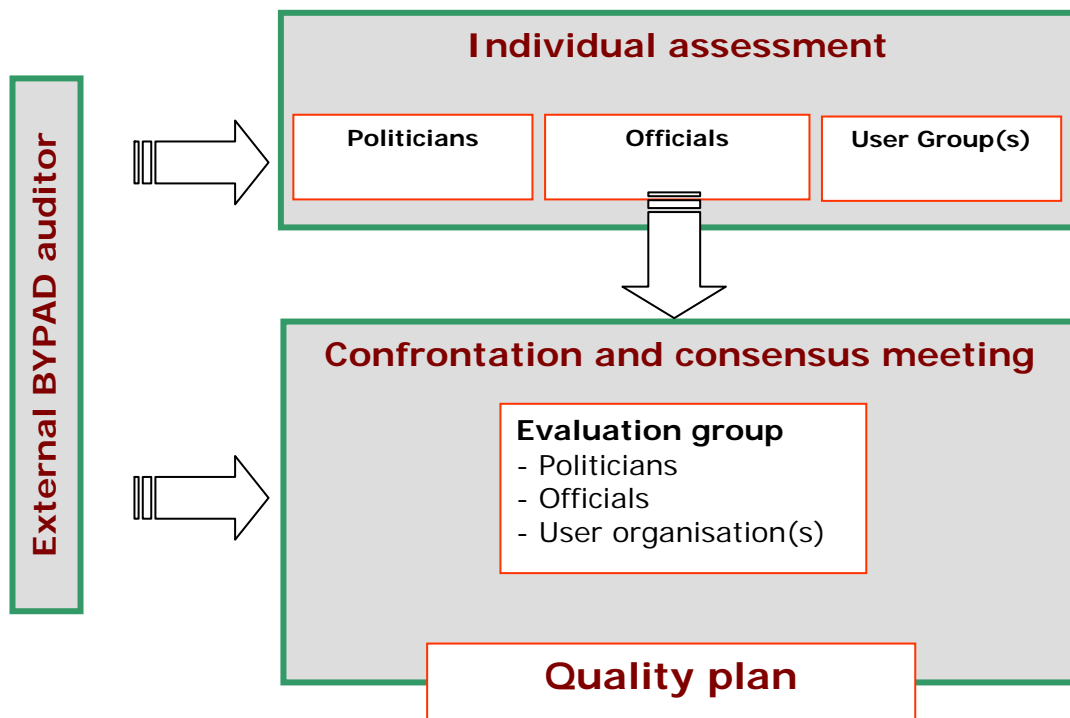


#### **1.2.4 BYPAD process**

At the beginning of the evaluation process, each member of the evaluation group fills in the BYPAD questionnaire individually. For each single aspect of the cycling policy, each member of the evaluation group assigns a quality level between 1 and 4. In a following meeting, when the whole evaluation group comes together, they are confronted with the judgements of the other members. It is the objective of this

meeting to find a consensus on the strengths and weaknesses of the actual cycling policy and to assign jointly a quality level to each question of the questionnaire. Based on the results of this debate, the evaluation group develops a quality plan for the future cycling policy during a second meeting.

Figure 4: BYPAD-process

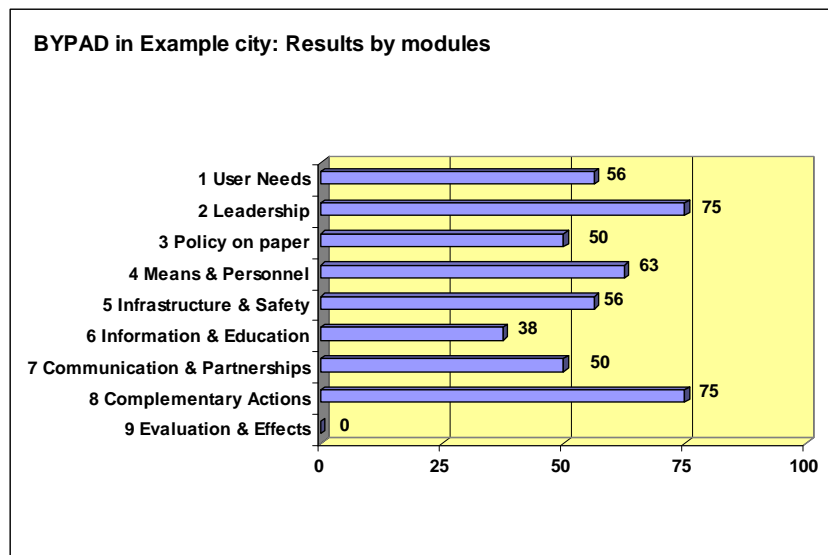


### 1.2.5 Certifying quality

As a result of a BYPAD audit process, a city/ town/ region gets scores for each of the nine modules and for its cycling policy as a whole. These scores indicate straightaway where the strengths and weaknesses of a city's cycling policy are. The interim and final reports of the audit, written by the auditor, are a detailed inventory of the cycling policy so far and a documentation of the audit process. The quality plan documents the objectives, main fields of action and measures the evaluation group has agreed on.



Figure 5: BYPAD-scores



Responsible policy-making is rewarded. After completion of the BYPAD-audit, the city receives the BYPAD certificate. This certificate confirms the active commitment of decision-makers, administrative bodies and citizens to a modern, high-quality cycling policy.



*BYPAD ceremony at Velo-city 2007 in München.*

Besides this city marketing; BYPAD offers the cities an objective monitoring tool for following up the improvements of their cycling policy. Repeated applications of BYPAD give cities/ towns/ regions the basis for setting out their cycling policy. For many cities the BYPAD-audit is the door-opener to start up improvement actions for the local cycling policy.

### **1.2.6 Recognized method**

In the national cycling strategies of Germany, Czech Republic and Austria, BYPAD is recommended to cities and towns as the QM-tool to improve their cycling policy. In the Czech Republic, the awarding of subsidies is coupled with the application of BYPAD. In Nordrhein-Westfalen (Germany), the application of BYPAD can be co-financed by the state government.

### **1.2.7 BYPAD is no beauty contest**

Main goal of BYPAD is to improve the bicycle policy of a city / region by this internal evaluation process and by learning from other experiences in European cities/regions. It is however a conscious choice of the city itself to use BYPAD and both the strongest elements as the weakest elements of its cycling policy will be detected.

Within the BYPAD-network it is however also attractive for the cities to compare its BYPAD-scores with other cities. A classical question which every mayor of a city wants to know is: "Are we the best European cycling city or who is the best cycling city?" This is however not the question you can easily answer with BYPAD. Following differences are inherent to comparing different cities in different cities:

- Geography of a city
- Different BYPAD-auditors
- Other personal opinions of the people in the evaluation groups
- Other cycling culture

At first place BYPAD should be used as an internal evaluation tool to improve its own cycling policy. Comparing the BYPAD-results every two or three years in a city is much more interesting to comparing 'apples with lemons' (see Figure 6: **Comparison BYPAD-scores in Gent (2001-2004)** ). At second place it is nice to see how other cities are scoring, but it always should be taken into account that this comparison is not reliable.

Figure 6: Comparison BYPAD-scores in Gent (2001-2004)

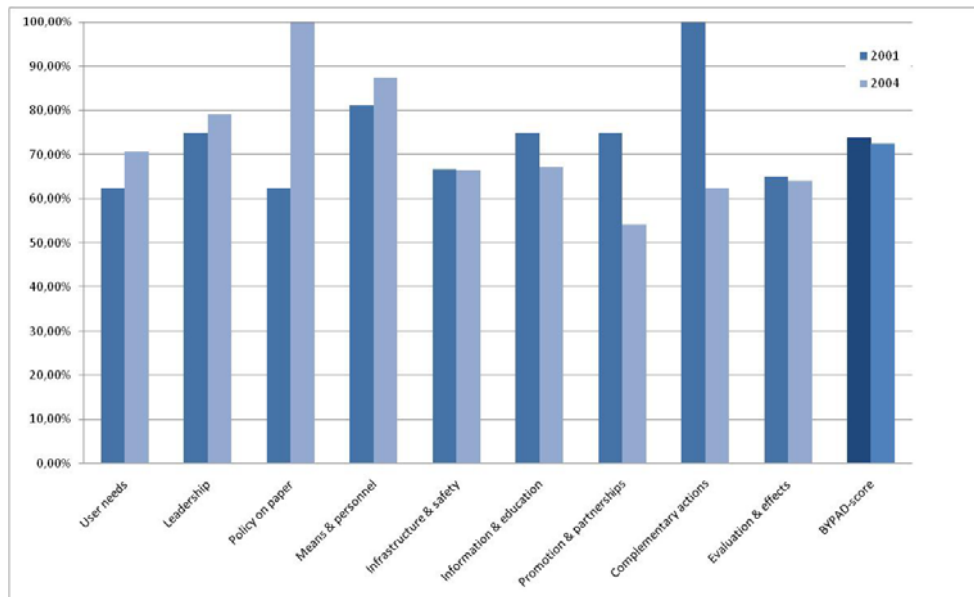
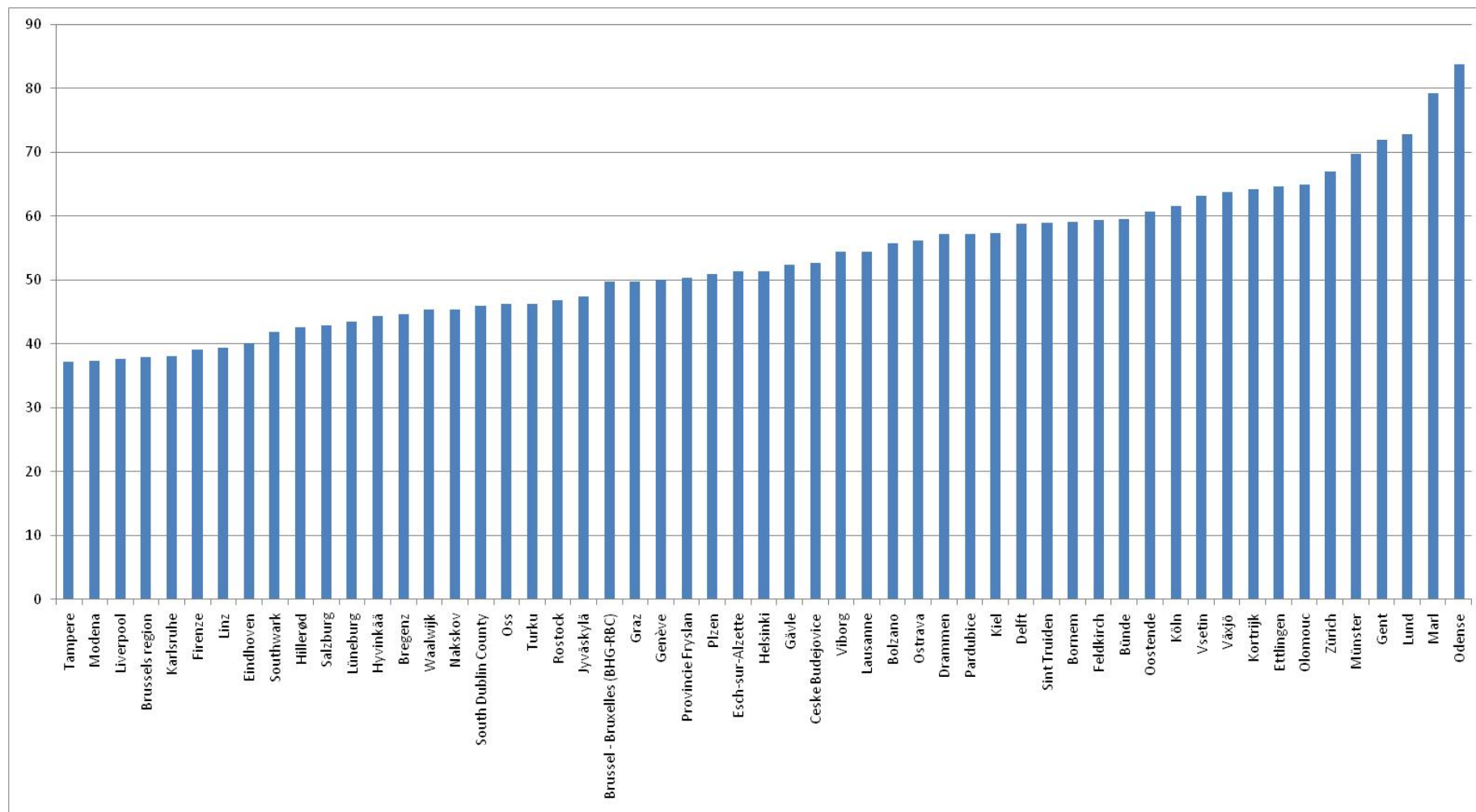


Figure 7: Scores BYPAD-cities



## 1.3 BYPAD in Europe

### 1.3.1 EU-projects

BYPAD was developed with European support via the SAVE and STEER programmes which support projects on sustainable urban transport. BYPAD has been developed and continuously further developed and applied since 1999, with support from the European Commission. Meanwhile more than 100 cities, towns and regions in 21 European countries are evaluating and improving their cycling policy, supervised by 58 certified auditors from these countries.

#### ***BYPAD-1999-2001: research project***

The BYPAD-tool was developed in 1999 -2001 by an international consortium<sup>1</sup> in the framework of an EU project (100% funded) and tested in seven European cities: Gent, Graz, Troisdorf, Birmingham, Zwolle, Ferrara and Grenoble. The first BYPAD-tool was focussed on mid-sized and big cities. Because of the enthusiastic reactions of the test-cities a follow up project – BYPAD+ – started in 2003.

#### ***BYPAD+ 2003-2004: training-dissemination project***

The aim of the subsequent EU project BYPAD+<sup>2</sup> (50% funded by the EU) was to improve the method and to apply BYPAD Europe wide. The BYPAD-tool was simplified, a training programme was set up and an active dissemination programme with regional workshops, international seminars, and interactive website, newsletters was set up.

At the end of 2004 an international network of certified BYPAD auditors was set up in 16 European countries. They succeeded to implement BYPAD in about 60 cities in Europe.

#### ***BYPAD-platform 2006-2008: widen method + dissemination project***

The last EU-project<sup>3</sup> (50% funded) started in 2006 and ended in September 2008. Goal was to widen the BYPAD-tool for towns and regions and to expand the network of auditors, cities, towns and regions to central Europe and the new member states.

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<sup>1</sup> Langzaam Verkeer, Belgium (co-ordinator), FGM-AMOR, Austria, velo:consult, Switzerland, European Cyclists' Federation

<sup>2</sup> Same consortium

<sup>3</sup> Vectris, Belgium (co-ordinator), IMOB-Hasselt University, Belgium, FGM-AMOR, Austria, velo:consult, Switzerland, Ligtermoet & Partners (The Netherlands), CDV (Czech Republic)

There has been developed a BYPAD-city, BYPAD-town and BYPAD-region tool and there have been trained 37 new BYPAD-auditors. Also the existing BYPAD-auditors followed an expert training to exchange all relevant new knowledge on cycling policy. In September 2008 BYPAD was implemented in more than 100 EU-cities / regions in 21 countries, guided by 58 certified auditors.

#### ***January 2009 .... : BYPAD-board as an independent organisation***

The BYPAD-platform project was the last EU-funded BYPAD-project. Since October 2008 BYPAD stands on its own. For giving a continuation to the BYPAD-activities some of the founding partners have started up a BYPAD-board which will give a continuation to all central BYPAD-activities. These activities are: updating the audit, organizing BYPAD-trainings, updating best practice database, certify BYPAD-cities/regions, communication (website, newsletter, ...), handing over BYPAD-certificates to cities/regions, organizing workshops/excursions, ... This BYPAD board is formed: FGM-AMOR (Austria), Velo:Consult (Switzerland), TIMENCO (Belgium-The Netherlands), CDV (Czech Republic) and ECF. The financial basis for these central activities will come from the membership fees of auditors and fees from cities/regions that are using BYPAD.

### **1.3.2 BYPAD in towns, cities and regions**

For implementing BYPAD there have been developed three different questionnaires to do the evaluation process. Reason for this is that depending on the size of a city and depending on the policy level of the authority there are a lot of differences in kind of measures you can implement for cycling policy. There has been made a specific questionnaire for:

- Towns

Under *towns*, we understand municipalities with a (limited) urban character. As a guide number, a town has around 30.000 to 50.000 inhabitants, but this figure really varies from country to country.

Concerning the administrative organization, a town has a small administration where one or two persons have responsibility for all tasks concerning cycling, transport and urban planning policy.

*There are 18 questions in the BYPAD-questionnaire for towns. The BYPAD-town questionnaire has been developed in 2006. In the period 2006-2008 13 towns have been implemented BYPAD*

- Cities and agglomerations

Under *cities and agglomerations*, we understand large urban areas which functionally need one integrated traffic policy. In practice these areas could cross different administrative borders (urban agglomerations) but it is vital to have a common vision on the transport / cycling policy.

As a lower limit, a city or agglomeration should at least have 50.000 inhabitants, but this figure really varies from country to country (e.g. a city of 50.000 inhabitants is mid-sized for Germany, while it is a large city for Slovenia).

Concerning the administrative organization, a city or agglomeration already has a rather big administration with different (city) departments which are dealing with transport, land use planning, education and environment.

*There are 30 questions in the BYPAD-city questionnaire. The BYPAD-city questionnaire has been developed in 1999 and since has been adapted regularly. In the period 1999 – 2008 88 cities have implemented BYPAD*

– Regions

Regions are the administrative level above the municipalities. Depending on the country, we are speaking about provinces, regions, counties, ...

Regions do have their own tasks in infrastructure planning, transport planning, education,... The list of tasks differs from region to region. BYPAD distinguishes two main types of tasks:

**Type A:** Executing direct cycling policy-measures: Realization and promotion of a regional cycling network and of bicycle facilities on/along regional roads, for daily and/or recreational cycling.

**Type B:** Implementing an indirect policy of stimulating the cycling policy of municipalities and local organizations: Facilitating local actors with funds, arguments, tools and knowledge.

Depending on the type of region you are auditing, you have to answer the questions which are related to Type A or Type B regions.

*There are 23 questions in the BYPAD-region questionnaire. The BYPAD-region questionnaire has been developed in 2006. In the period 2006 – 2008 18 regions have implemented BYPAD*

Table 1 gives an overview of the cities/towns and regions which have implemented BYPAD in the period 1999-2008. As the BYPAD-tool is at first place a self-evaluation instrument most of these authorities will use BYPAD again to see if they have made progress in their cycling policy in the last years.

Table 1: BYPAD-cities and regions in the period 1999-2008

Nr	City/Region/town	Country	Year
1	Linz	Austria	2001
2	Graz	Austria	2000
3	Salzburg	Austria	2002
4	Schwechat	Austria	2003
5	Graz	Austria	2003
6	Bregenz	Austria	2005
7	Feldkirch	Austria	2006
8	Land Steiermark	Austria	2006
9	Dornbirn	Austria	2007
10	Lustenau	Austria	2007
11	Gent	Belgium	2000
12	Kortrijk	Belgium	2003
13	Oostende	Belgium	2004
14	Brussels	Belgium	2004
15	Gent	Belgium	2006
16	Brussels	Belgium	2006
17	Sint Truiden	Belgium	2006
18	Bornem	Belgium	2007
19	Pardubice	Czech Republic	2003
20	Ostrava	Czech Republic	2003
21	Olomouc	Czech Republic	2003
22	Ceske Budejovice	Czech Republic	2003
23	Vsetin	Czech Republic	2004
24	Plzen	Czech Republic	2004
25	The Usti Region	Czech Republic	2008
26	The Hradec Králové Region	Czech Republic	2008
27	The Region of Central Bohemia	Czech Republic	2008
28	The Zlín Region	Czech Republic	2008
29	The Olomouc Region	Czech Republic	2008
30	The Region of South Bohemia	Czech Republic	2008
31	The Region of South Moravia	Czech Republic	2008
32	Viborg	Denmark	2003
33	Odense	Denmark	2003
34	Nakskov	Denmark	2003

35	Hillerød	Denmark	2003
36	TARTU	Estonia	2006
37	Tallinn	Estonia	2007
38	Tampere	Finland	2003
39	Jyväskylä	Finland	2003
40	Helsinki	Finland	2003
41	Hyvinkää	Finland	2004
42	Turku	Finland	2004
43	Grenoble	France	2000
44	Montbeillard	France	2003
45	Versailles	France	2003
46	Grenoble	France	2006
47	Troisdorf	Germany	2000
48	Bünde	Germany	2003
49	Marl	Germany	2003
50	Münster	Germany	2003
51	Ettlingen	Germany	2003
52	Köln	Germany	2003
53	Karlsruhe	Germany	2004
54	Lüneburg	Germany	2004
55	Kiel	Germany	2004
56	Rostock	Germany	2005
57	Troisdorf	Germany	2006
58	Unna	Germany	2007
59	Kreis Borken	Germany	2007
60	South Dublin County	Ireland	2004
61	Ferrara	Italy	2000
62	Firenze	Italy	2004
63	Modena	Italy	2004
64	Bolzano	Italy	2004
65	Ferrara	Italy	2007
66	Provincia di Milano	Italy	2007
67	Arese	Italy	2007
68	Garbagnate Milanese	Italy	2007
69	Cesate	Italy	2007

70	Sesto San Giovanni	Italy	2007
71	Melegnano	Italy	2007
72	San Donato Milanese	Italy	2007
73	Principdom Lichtenstein	Liechtenstein	2007
74	Schaan	Liechtenstein	2007
75	Mauren	Liechtenstein	2007
76	Eschen	Liechtenstein	2007
77	Balzers	Liechtenstein	2007
78	Esch-sur-Alzette	Luxembourg	2007
79	Drammen	Norway	2004
80	Tczew	Poland	2008
81	Gdansk	Poland	2008
82	Malbork	Poland	2008
83	Seixal	Portugal	2004
84	Beja	Portugal	2004
85	Cascais	Portugal	2004
86	Domžale	Slovenia	2008
87	Brežice	Slovenia	2008
88	Murska Sobota	Slovenia	2008
89	Rogaška Slatina	Slovenia	2008
90	Škofja Loka	Slovenia	2008
91	Region Maribor	Slovenia	2008
92	Region Kranj	Slovenia	2008
93	Ptuj	Slovenia	2008
94	Menorca	Spain	2006
95	Mataró	Spain	2007
96	Donostia	Spain	2007
97	Lund	Sweden	2004
98	Växjö	Sweden	2004
99	Karlstad	Sweden	2005
100	Gävle	Sweden	2006
101	Falun	Sweden	2006
102	Basel-Stadt	Switzerland	2002
103	Lausanne	Switzerland	2004

104	Genève	Switzerland	2004
105	Zürich	Switzerland	2006
106	Canton of Zurich	Switzerland	2007
107	Zwolle	The Netherlands	2000
108	Delft	The Netherlands	2003
109	Emmen	The Netherlands	2004
110	Waalwijk	The Netherlands	2004
111	Eindhoven	The Netherlands	2004
112	Oss	The Netherlands	2004
113	Zwolle	The Netherlands	2007
114	Stadsgewest Haaglanden	The Netherlands	2007
115	Provincie Zeeland	The Netherlands	2007
116	Provincie Fryslan	The Netherlands	2007
117	Birmingham	United Kingdom	2000
118	Liverpool	United Kingdom	2004
119	Southwark	United Kingdom	2004



Figure 8: BYPAD-cities in Europe



Figure 9: BYPAD-cities in Spain-Portugal



Figure 10: BYPAD-cities in central-Europe



Figure 11: BYPAD-cities in West-Europe

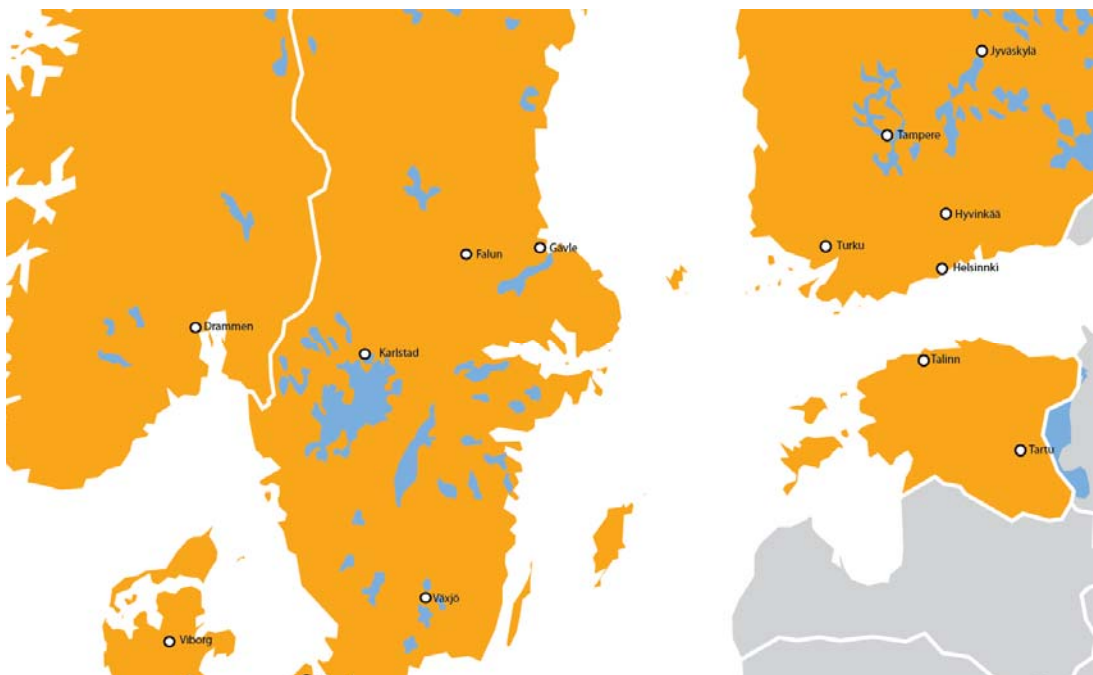


Figure 12: BYPAD-cities in Scandinavia



Figure 13: BYPAD-cities in Ireland and the UK

### 1.3.3 Exchange of cycling expertise

Besides implementing the BYPAD audit and making a cycling quality/action plan for a city/town/region the second goal of BYPAD is the exchange cycling expertise in Europe. Following activities are organised for reaching this goal:

- **National/regional workshops, by language region.** On these workshops, the participating cities/regions actively play a role and new cities/regions are coming into contact with the BYPAD-tool (e.g. Recklinghausen, Germany, in German for D-A-CH. Genève, Switzerland, in French for CH-F-B), 's Hertogenbosch, The Netherlands, in Dutch for NL-B, Lund, Sweden, in Swedish and Danish for S-DK-N).
- **International seminars / excursions:** international seminars on specific cycling topics and excursions are organised to stimulate the exchange of cycling expertise (e.g. Ceske Budejovice/Czech Republic 2006, Munich/Germany 2007, Tartu/Estonia 2008, ...).
- **BYPAD-website:** [www.bypad.org](http://www.bypad.org) is both an informative medium as a working instrument for the BYPAD-auditors and BYPAD-cities/regions. There is a *public area* (with information on the BYPAD-method, contact points, experiences of cities, best practice database) and a *protected area* with results of the BYPAD-cities, city reports, BYPAD-questionnaire, city registration etc.
- The **best practices database** of BYPAD gives examples of all BYPAD-cities. This means there are given examples for all different quality levels in cycling policy.

Cities, regions that are on a low level also find inspiration what they can do in cycling policy.

- The **3 BYPAD-questionnaires** for cities/ towns/ regions are each available in 15 languages.
- The **BYPAD-newsletter**, published 3 times a year, is disseminated throughout the BYPAD network and via the contacts of the BYPAD auditors and network partners.

## 1.4 Other evaluation methods

During the last ten years there is an increasing awareness for the need of a high-quality cycling policy. Looking for manners for assessment and improvement of the quality of local cycling policy, benchmarking instruments and indicator systems have been developed and measures and programmes have been evaluated in several countries:

- United Kingdom: *Benchmarking project* of the CTC (user organisation);
- Netherlands: *Fietsbalans (Cycling Balance)* of the Dutch cyclists' association (user organisation);
- Switzerland: *Indicators for cycle-friendly cities and towns* (research project of the SVI);
- Germany: *Evaluation of the cycling policies* of the member cities of the city network 'Cycle-friendly cities and towns in Nordrhein-Westfalen' (region of North-Rhein-Westfalen)
- Bicycle Account of Copenhagen

Each method has his own approach and the focus is sometimes on different aspects. Also the initiator who decides to work with the instrument is very important. For instance, The Cycling Balance in The Netherlands is an initiative of the Dutch cyclists' association who wants to award the best cycling city of the year. At the same time they are delivering a status report on the comfort of cycling (by means of a measure bicycle) in that city. The Dutch Cyclists' Association is doing a lot of national wide press communication on the results of the Cycling Balance and by this approach the screened cities feel the pressure to get cycling policy on a high quality standard. The result of the Cycling Balance is the opinion of the user groups association.

In BYPAD it are not the user groups who are the initiators of the audit. It is really the city/region who decides: "I want to improve my bicycle policy, and I am going to use BYPAD to make an advice on the actual quality level and the improvement steps". The external pressure to become the best cycling city is less strong, but with BYPAD you can be sure that the city really has ambitions to improve cycling policy.

In the next tables you find an overview of the characteristics of the different evaluation methods for cycling policy.

	BYPAD (Europe)	CTC Benchmarking local cycling policy (UK)	The Cycle Balance (Netherlands)	Benchmarking cycling in towns & villages (Switzerland)	Bike-Friendly cities and towns (Germany)
<i>Initiative implementation</i>	Municipality	Cyclist Union	Cyclist Union	Municipality	Municipality
<i>Object of investigation</i>	Cities, towns and regions	Cities, towns	Cities, towns	Towns	Cities, towns, regions
<i>Parties involved</i>	<ul style="list-style-type: none"> <li>politicians</li> <li>civil servants</li> <li>users / user group</li> <li>external supervisor</li> </ul>	Facilitator, nominated person authority. At visits also: other officers and users.	Users, officials	Evaluation itself: municipality  Later: all people who can be a driving force	Ministry, experts, specialists-group, city
<i>Procedure</i>	<ol style="list-style-type: none"> <li>Collecting prerequisite information</li> <li>self-auditing on the basis of a questionnaire first individually by the 3 groups (politicians, civil servants, user groups)</li> <li>confrontation and consensus meeting</li> <li>draw up a cycling policy quality plan</li> <li>Final report</li> </ol> <p>The process is coordinated by an extern supervisor</p>	<ol style="list-style-type: none"> <li>state of affairs</li> <li>introduction quality management</li> <li>comparison with other cities (benchmarking), each city visit each other cities</li> <li>consolidation and action plan (=key output)</li> <li>evaluation</li> </ol> <p>visits are key-part</p>	<p>Assessment of the local conditions for cyclists on the basis of 10 dimensions. Then compare the results with other cities</p> <ol style="list-style-type: none"> <li>existing and developed standards</li> <li>average scores of all assessed towns and towns of roughly the same size</li> <li>best scoring towns</li> </ol> <ul style="list-style-type: none"> <li>Quick scan to assess city</li> <li>Questionnaire municipality</li> <li>Questionnaire cyclists</li> <li>Field test (meetfiets)</li> </ul>	<p>Describe bicycle policy (with the evaluation guide) and reinforce communal policy in favour of cycling</p> <p>With the filling in of the guide the participants are been motivated to develop a future vision on bicycle policy. Based on strategies, determination of needed people, provided incentives (by showing best practices).</p> <p>Give ideas, don't judge</p>	<p>On the basis of some qualitative criteria, a visit by the selection commission (or two visits) certain cities are selected as bike-friendly cities.</p> <ol style="list-style-type: none"> <li>Application city</li> <li>Check by ministry</li> <li>Preparations by 2 experts</li> <li>Recommendation</li> <li>18 specialists visit city</li> <li>Another recommendation</li> <li>Ministry decides, if yes: sign and document</li> </ol> <p>Membership for 7 yr. then new application necessary</p>
<i>Duration / time involved</i>	3-4 months: Politicians: 3,5 days, employees: 7 days, user groups: 3,5 days, process supervisor: 15 days.	9-12 months: 25-40 days participant (1 or 2 persons), 3 day / week facilitator	4-6 months: 1 day civil servant, 15 days Bicycle Union	1 or 2 days	See above: (2) 1 day (3) 1 or 2 days (5) 1 day

	BYPAD (Europe)	CTC Benchmarking local cycling policy (UK)	The Cycle Balance (Netherlands)	Benchmarking cycling in towns & villages (Switzerland)	Bike-Friendly cities and towns (Germany)
<i>What aspects</i>	(0) background information (1) user needs (2) policy steering / leadership (3) strategy & procedure (4) management means (5) management personnel (6) projects & actions (7) evaluation & monitoring	All: from promotion to engineering design, from training to maintenance of cycle paths  (policy and practice)	Physical aspects	<ul style="list-style-type: none"> <li>- Potential</li> <li>- Construction</li> <li>- Practice and use</li> <li>- Means</li> </ul>	See bike traffic as a system → broad view
<i>Emphasis / focus</i>	Policy	Networking, comparison (best practices)	Result, publicity and influencing public opinion	Creating a bicycle culture	Best practices
<i>Outcome</i>	<ul style="list-style-type: none"> <li>- Report</li> <li>- Quality plan</li> </ul>	<ul style="list-style-type: none"> <li>- 500 specific examples of good practice, nearly half best practices</li> <li>- action plans</li> <li>- network</li> </ul>	<ul style="list-style-type: none"> <li>- Standardized report (65-70p. Very detailed)</li> <li>- Comparison of city result</li> <li>- Recommendations for improvement</li> <li>- Official presentation of report to city (with media)</li> </ul>	Definition of 7 levers for promotion of bicycling  Greater awareness of importance cycling	<ul style="list-style-type: none"> <li>- Increased bike use</li> <li>- Higher safety bikers</li> <li>- Learning from each other</li> <li>- Exchanging experience</li> <li>- Promotion bike</li> </ul>
<i>Strengths</i>	<ul style="list-style-type: none"> <li>- Given answers give inspiration</li> <li>- Comprehensive approach</li> <li>- Profound analysis of how results are obtained</li> <li>- Involvement all actors</li> <li>- External (objective) process supervisor</li> </ul>	<ul style="list-style-type: none"> <li>- In-depth analyses of processes behind best practices</li> <li>- Opportunity to review and update performance indicators and targets</li> <li>- Raised profile of cycling</li> <li>- Increased confidence</li> <li>- Networking</li> </ul>	<ul style="list-style-type: none"> <li>- Bicycle user as perspective</li> <li>- Objective measurement</li> </ul>	<ul style="list-style-type: none"> <li>- Raise awareness of importance bicycle</li> <li>- Give inspiration</li> <li>- Very quick method, not at all time-consuming</li> </ul>	<ul style="list-style-type: none"> <li>- Create a better climate for bikers</li> <li>- 10<sup>th</sup> anniversary: new guidelines</li> <li>- 7 yearly review, keep the cities alert</li> </ul>

	BYPAD (Europe)	CTC Benchmarking local cycling policy (UK)	The Cycle Balance (Netherlands)	Benchmarking cycling in towns & villages (Switzerland)	Bike-Friendly cities and towns (Germany)
<i>Weaknesses</i>	<ul style="list-style-type: none"> <li>- Formulation different levels of developments not clear enough</li> <li>- Two questions in one</li> <li>- Questions too long/complex</li> <li>- Answers not always relevant</li> <li>- Information financial means</li> <li>- Collecting quantitative data</li> <li>- Very time-consuming</li> </ul>	<ul style="list-style-type: none"> <li>- Availability of data bottleneck</li> <li>- Limitations of making meaningful comparisons (uniqueness local auth.)</li> <li>- Qualitative data can't be measured directly</li> <li>- Not comprehensive</li> <li>- Very time-consuming</li> </ul>	<ul style="list-style-type: none"> <li>- Technical character, black box for cities</li> <li>- General character, no identification of bottlenecks</li> <li>- Usability relies on local branches Cyclist Union</li> <li>- Initiative outside decision-makers</li> <li>- Very time-consuming</li> </ul>	<ul style="list-style-type: none"> <li>- Not systematically</li> </ul>	<ul style="list-style-type: none"> <li>- Selecting method isn't scientifically sound and not easily comprehensible</li> </ul>
<i>Future / ambitions</i>	BYPAD-organisation who offers training and auditing on cycling policy.	Exploring avenues to undertake benchmarking at regional level	Not mentioned	Not mentioned (maybe support at national level)	<p>Develop bike traffic plan based on concept of bike traffic as a system and an integrative approach in traffic planning.</p> <p>Also attention for information and communication.</p> <p>Realize measurable traffic and urban planning guidelines (for monitoring)</p> <p>What is the definition of a bicycle friendly city?</p> <p>Local made-to-measurement</p>

## **2 CYCLING IN EUROPE: DIFFERENCES IN CYCLE USE AND POLICY**

### **2.1 Bicycle use in the EU / Influencing factors of cycle use**

*As a basis for the EU BYPAD-platform project the Transport Research Institute of the University in Hasselt in Belgium made a literature search of existing data and knowledge on bicycle use (modal split data) and traffic safety; and existing knowledge on influencing factors of cycle use.*

*This literature search showed that comparable data on modal share of cycle use where rare on local level. These modal split data exist on national level, but these figures are also difficult to compare. Different collection methods and other registration years give an indication of the modal share of cycling on European level, but it is clear that there is a need for comparable data in the future.*

*In BYPAD we could find different modal split data on city level, but also here the sources are really different from each other (other collection method, other years of collecting the data).*

***To give you the complete overview of existing material. The complete literature search is put in the annexes of this document.***

*In the next chapters we analyse the new data and the new insight on differences in cycle policy based on the BYPAD-audits which have been implemented in more than 100 cities, towns and regions in 21 European countries.*

### **2.2 Bicycle policy in Europe: which balance between infra and promo measures?**

#### **2.2.1 BYPAD-scores and bicycle use**

With the BYPAD-experience of working in so many European countries and so many different cities it has become clear that nowadays cycling policy and cycle use is at different levels despite cycle use has started at an almost equal level in the beginning of the 20th century. In all BYPAD-cities the will to realize a modal shift from car to more cycling is there, but BYPAD clearly proved that there are big differences in approaches.

In this chapter we used the scores of 55 BYPAD-cities for which we also found modal split figures. We want to get answers to following questions:

- Is a high BYPAD-score also linked to a high bicycle use?
- Do we see differences between countries concerning the type of measures that get a high score (e.g. Is there more emphasis on infrastructure measures in Nord European cities than in South European cities?)?
- Do we see an evolution in type of cycling measures linked to the BYPAD-score ?(= Is the compilation of cycling measures linked to the level of development of cycling policy?)

Based on the analysis of the BYPAD-scores in 55 cities we see a positive correlation between bicycle use and BYPAD-score, but it isn't strong (+ 0,25). (see figure 9)

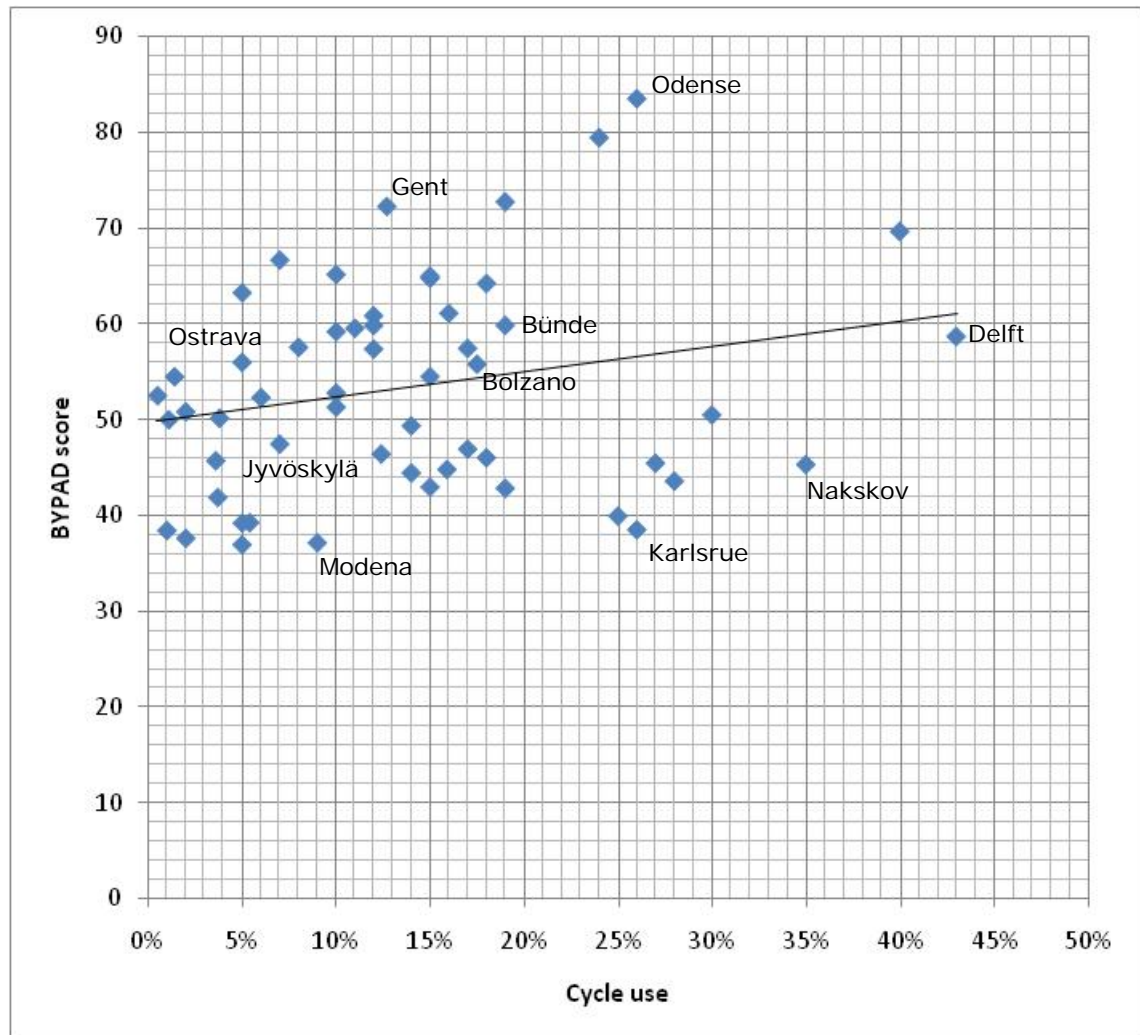
We only used 55 cities of the 119 cities and regions that ones implemented a BYPAD-audit. In these cities the same questionnaire was used which forms a first comparison basis. The list of these cities is in tabel 2.

Table 2: comparable BYPAD-cities

City/Region/town	Bicycle share	City/Region/town	Bicycle share
Delft	43%	Bornem	12%
Münster	40%	Drammen	12%
Nakskov	35%	Oostende	12%
Provincie Fryslan	30%	Feldkirch	11%
Lüneburg	28%	Ceske Budejovice	10%
Waalwijk	27%	Helsinki	10%
Karlsruhe	26%	Olomouc	10%
Odense	26%	Sint Truiden	10%
Eindhoven	25%	Modena	9%
Marl	24%	Pardubice	8%
Bünde	19%	Jyväskylä	7%
Lund	19%	Zürich	7%
Salzburg	19%	Gävle	6%
Oss	18%	Firenze	5,40%
Växjö	18%	Linz	5%
Bolzano	17,50%	Ostrava	5%
Kiel	17%	Tampere	5%
Rostock	17%	Vsetin	5%
Köln	16%	Genève	3,80%
Hyvinkää	15,90%	Southwark	3,70%
Ettlingen	15%	South Dublin County	3,60%
Hillerød	15%	Liverpool	2%
Kortrijk	15%	Plzen	2%
Viborg	15%	Lausanne	1,40%
Bregenz	14%	Brussels	1,10%
Graz	14%	Brussels region	1%
Gent	12,70%	Esch-sur-Alzette	0,50%
Turku	12,40%		

Source: BYPAD-audit reports

Figure 9: Correlation between BYPAD-score and cycle use



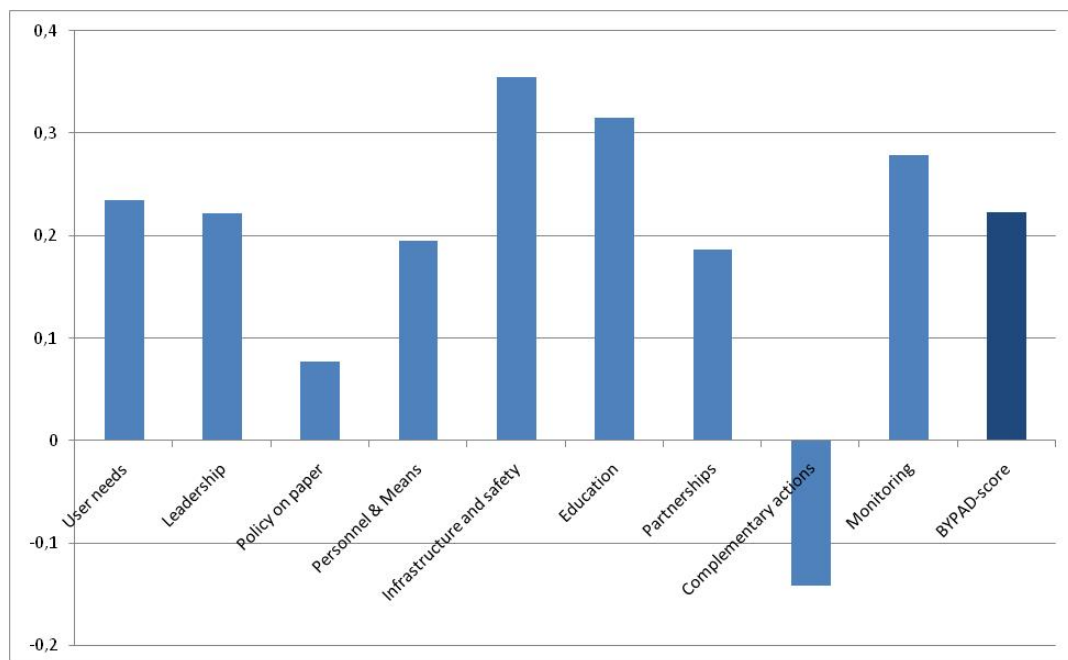
The most important explanation for this rather weak correlation is the influence of the **personal opinion and assessment of the evaluation group together with the auditor**. In every cities the BYPAD-assessment is done in the same structured way but opinions on for instance what is a high quality cycling infrastructure really differ from country to country. For example, the BYPAD-score of the Dutch city of Eindhoven was much lower than the BYPAD-score of the city of Olomouc in the Czech Republic. Although the city of Olomouc is doing a lot of efforts concerning cycling policy everybody knows this city is still far from behind what is done in a normal city in The Netherlands.

These differences in interpretation of what is high quality and what is low quality are cleared out as much as possible through the BYPAD-questionnaire which is giving possible actions that are linked to a certain quality level. Nevertheless this correlation exercise shows that it is impossible to compare cities from different countries but it is interesting to compare cities within one country.

Like explained before BYPAD is also a time shot of the efforts done on cycling policy nowadays. **Effects and results on cycle use, traffic safety always have a delay of several years.** Doing a lot of preparation work now (e.g. recruiting a bicycle officer, fixing higher budgets for cycling policy, designing a cycle network, ...) will result in a high BYPAD-score which within some years also results in a higher bicycle use. **There is however always a delay between the BYPAD-score and the increase of bicycle use.**

Also for almost all the BYPAD-modules there is a positive correlation between the module score and bicycle use, but like explained above these positive correlations are never high (see figure 10). A positive correlations means that there is a higher BYPAD-score if there is a higher cycle use. The strongest positive correlation is on the module of infrastructure. This is surely an indication that having a high quality infrastructure has the strongest effect on cycle use. Only for the module of complementary actions, where there is asked what kind of measures the city is taken to curb car use (parking policy) and cycle friendly the spatial planning policy is, there is a negative correlation. For this module all BYPAD-cities and regions also had a very low score, which explains the negative correlation.

Figure 10: Correlation between bicycle use and scores BYPAD-modules



Source: BYPAD-scores of 55 cities – see table 2

### 2.2.2 Cycle use as indicator for package of cycling measures

Despite the absence of a direct correlation between the actual efforts done on cycling policy and the effects in cycle use or traffic safety it becomes however clear that **the package of necessary and justified cycling measures differs from level of cycle use in a city or region**. For example in a city with a low cycle use it is logical to invest in infrastructure and traffic safety before stimulating and promoting bicycle use. It would even be immoral to promote bicycle use via campaigns or school projects if it is unsafe or uncomfortable to cycle. **Depending on the level of development a city / region has reached the most effective package of cycle measures differs.**

That is also the main reason why the exchange of experience in the BYPAD-network is organized between cities and regions who are on a similar quality level of cycling policy. See also the best practice database on the website [www.BYPAD.org](http://www.BYPAD.org)

**HOWEVER, A BASIC PRINCIPLE OF BYPAD IS THAT THE PACKAGE OF MEASURES TO INCREASE CYCLE USE AND TRAFFIC SAFETY IS ALWAYS A MIX OF INFRASTRUCTURE MEASURES AND SOFT MEASURES (INFORMATION, PROMOTION, ...).**

Three categories of improvement packages can be defined:

#### 1. Starting cycling cities, modal share < 10%:

##### **GOAL: MAKE CYCLING POSSIBLE/SAFE/COMFORTABLE**

A basis level of bicycle facilities (cycle lanes, bicycle parking, traffic calming zones, ...) should be implemented before a city / region starts stimulating cycle use through campaigns, information, ...

The city should communicate on all the cycle measures they are taken and which advantages cycling has

#### 2. Climber cycling cities, modal share 10-20%:

##### **GOAL: CONVINCING MORE PEOPLE TO USE THE BICYCLE**

In this stage there is still a big potential for shifting from car trips to cycle trips. The city should communicate actively about the advantages of cycling and all kind of promotion initiatives should be started (school, employers, ...).

A continuous improvement of the cycle conditions (comfort, safety) is necessary.

### 3. Champion cycling cities, modal share > 20%:

#### GOAL: KEEP PEOPLE CYCLING

In this stage most of the short distance trips are made by bicycle (or public transport). It is not necessary any more to convince people of the advantages of bicycle use, but the challenge is to keep people on the bike.

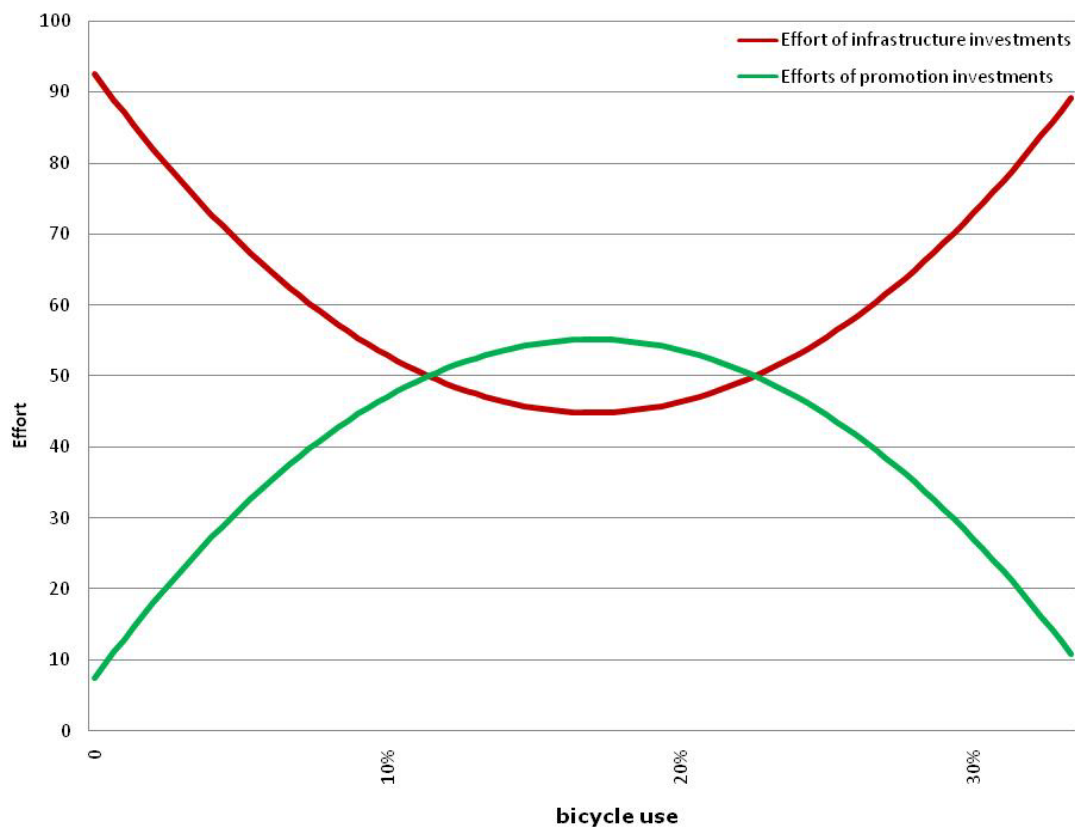
As the user demands are changing continuously the attention to new investments in cycle comfort, safety is again vital for this stage.

**The above mentioned link between level of cycle use and type of package of cycling measures is a hypotheses which is more or less confirmed in BYPAD, but not scientifically proved.**

The outcome of the BYPAD quality plan is always a mixture of infrastructure and promotion measures and dependant on the quality level of cycling policy and the level of bicycle use, there is more or less emphasis on infrastructure.

In figure 11 this balance between infrastructure measures and promotion measures is made clear in a scheme. This scheme is only showing the relative balance between hardware and software measures.

Figure 11: balance of infrastructure measures and promotion measures



**Champion cities:**

When zooming into the results of the BYPAD-cities the above mentioned hypothesis is not clearly proven but we clearly see that cities at the highest level of cycle use (> 20%) still are doing major efforts in investments infrastructure.

*For example:*

*The city of Odense in Denmark has a modal share of 26% of cyclists. Despite this high level over cycle use, the city is investing in bicycle comfort via green waves for cyclists on the major cycle routes, high level bicycle pavements in the city centre, top design and covered bicycle parking places, ...*

*The promotion of cycle use is not explicitly done by informing people on the advantages of bicycle use, but cycling is part of the city marketing. In all possible ways the city communicates about bicycle and all city related events are also linked to bicycle promotion. A perfect example of "useless" measure toward direct improvement of the safety or comfort is the bicycle barometer which is a bicycle counter at an eye catching point in the city which is clearly visible for all passersby. This infrastructure measure is a 100% bicycle promotion action.*



*Green wave for cyclists in Odense*



*Bicycle counter - Odense*

**Climber cities:**

Cities that are at a medium level of cycle use (10-20 %) have a focus both on improvement of the bicycle network as on promotion campaigns for different user groups. In these cities the internal organization of the city administration is still changing attitudes towards a complete integration of the importance of the bicycle in all kind of city planning aspects. A cycling officer who is working within the transport department will soon become needless as the whole transport department and also other departments are taken into account cycling measures.

*For example:*

*The city of Gent in Belgium with a modal split of 13% of cyclists is still investing in the realization of a city wide bicycle network. The four major routes are finished but bicycle facilities along a lot of major roads are still lacking. An intensive program of construction and improvement of bicycle lanes has started together with the regional authority.*

*As there is still a high potential for new cycle trips on the short distances, the city of Gent actively works on cycling to school programs and actively looks for incentives for their employees and employers to stimulate commuters to cycle to work. The continuous attention of cycle measures and cycle promotion in the press is also a conscious choice of Gent to keep cycling in the attention.*



*Campaign 'Gent Wild of cycling'*



*Guarded bicycle parking at railway station Gent*



*Bicycle parking for city staff + 0,15 € /km for cycling to work in Gen*



*School pooling with basic schools in Gent*

**Starting cities:**

For cities that are at the lowest level of bicycle use (< 10%) it is of course the cheapest way to start with promotion campaigns to stimulate cycling (e.g. cycling to school campaigns, health campaigns, ...) but it is not honest or it is even immoral only to stick to promotion campaigns when it is still unsafe and uncomfortable to cycle.

At the lowest level of cycling policy and cycle use it is not the role of the city/region to actively communicate on all the advantages of cycling as long as no comfortable and safe cycling environment has been created. At this quality level it is up to the individual users and the user groups associations to continuously communicate about the use of cycling for your health, for the environment, for the traffic congestion, ... These user groups have to make aware the politicians to take real actions in the field of cycling comfort. It is up to the user groups to form a critical mass who has enough influence to force politicians to take actions in the field.

Taking the decision to invest in safe bicycle infrastructure or traffic calming zones in a city with a low bicycle use is the most difficult but only right decision in the whole process of improving the bicycle policy. In too much cities the main focus is 'easily' on promotion and press attention for the bicycle, but on long term it means you won't get at a higher level of cycling policy.

*For example:*

*The Brussels Region in Belgium with a modal split of 2-3 % of cyclists' is already active in communicating on the use and importance of cycling in the city, but only in the last years the region is also taking serious the importance of safe and comfortable infrastructure and of traffic calming zones. Brussels is still a very car oriented city but in the next years it looks very promising to have more and more high quality cycling facilities including bicycle parking. Brussels was also one of the pioneers in Europe to allow cyclists in two directions in one way streets.*

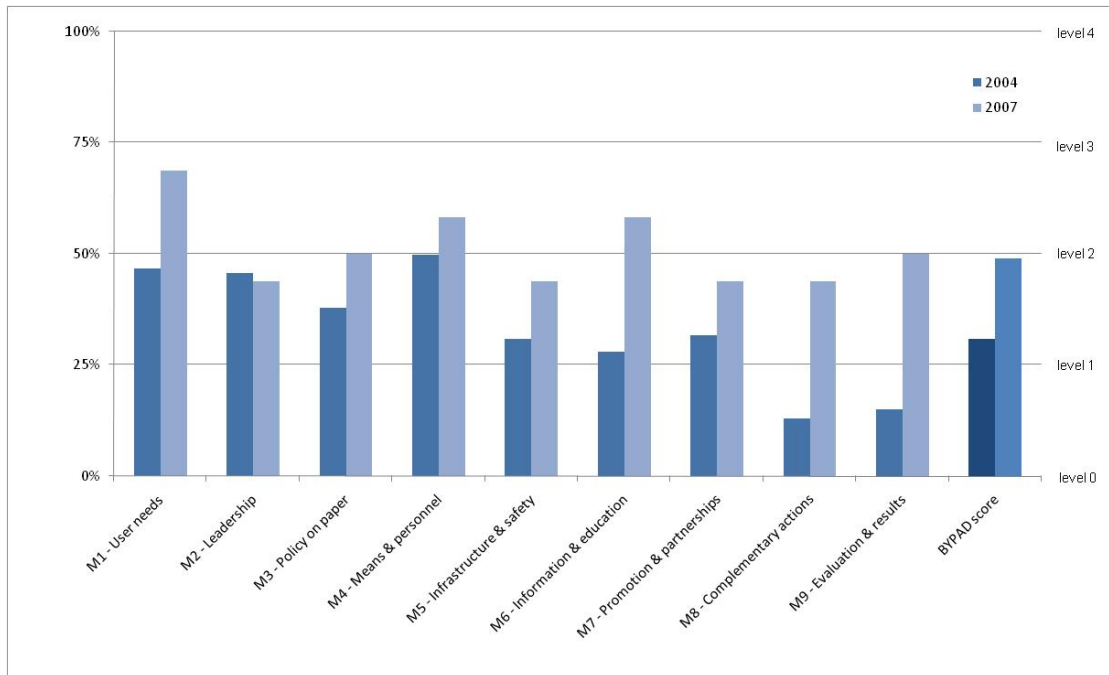
*Also at the level of the administration there has been recruited a bicycle officer and presently there are at least 6 people active in planning and implementing cycling policy. Also the co-operation with the user groups is strongly organized via a monthly bicycle commission where all bicycle projects of the region are discussed with the user groups associations.*

*Actions on communication and promotion are focused at cycling to school programs, a bicycle map and some yearly big events on cycling: Dring-Dring (a week focused on cycling use in Brussels) and Bicycity (a big cycle ride via the highways into Brussels at a car free Sunday in May, with more than 10.000 participants).*

*To show the world that Brussels is taking cycling seriously the Brussels Region is hosting the international conference Velo-city2009. This conference will be a milestone for Brussels to show the world what has been accomplished and secondly the role of Europe will be emphasized at Velo-city2009 Brussels.*

*The BYPAD-audit has been implemented twice in the Brussels Region. The evolution how the Brussels Region is making progress in cycling policy is clearly visible in Figure*

Figure 12: BYPAD-scores in the Brussels Region in 2004 and 2007



*Bicycity Brussels*



*Bicycle training - Brussels*

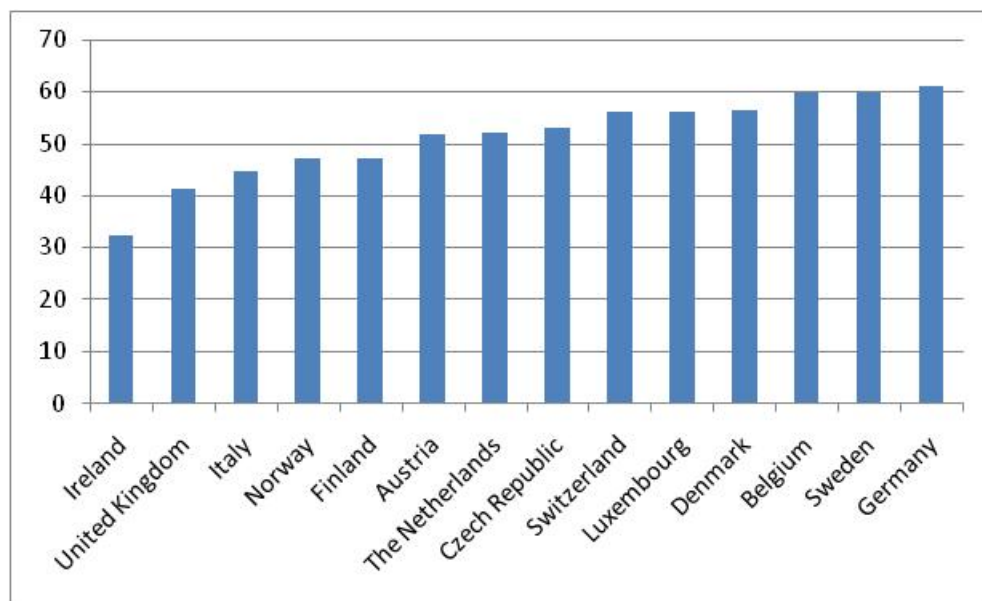
### 2.2.3 Differences between countries ?

It is possible to describe the differences in cycling policy between the different European countries based on the BYPAD-results? And can countries learn from each other's approach?

These are questions we would like to answer based on the results in the BYPAD-cities. It is however important to know that such a comparison is dangerous as we make averages of BYPAD-scores per country based on the BYPAD-results in the cities of that country. **As not all cities in a country have been audited and as in some countries more cities have been audited this comparison can't be considered as a state of the art of differences between countries.**

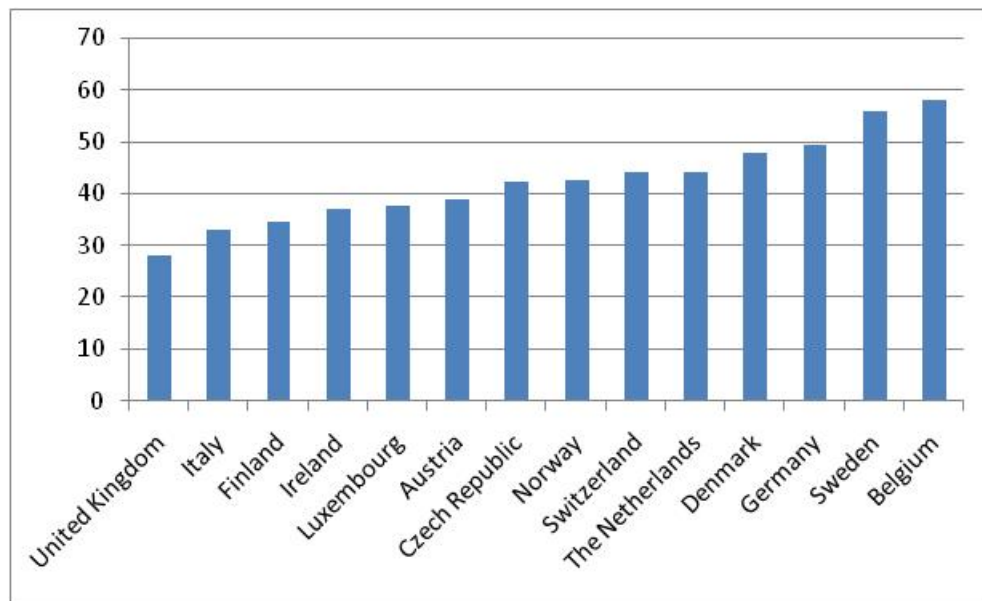
For the information we give the table for the *module infrastructure & safety* and for the *module information & education*. As these tables are based on results in very different cities and based on the qualitative evaluation process by different auditors it is however not possible to draw conclusions on differences between countries. Everybody would expect The Netherlands on top of the module infrastructure & safety, but like already explained before the evaluation groups in The Netherlands were much more critical than for instance in the Czech Republic.

Figure 13: BYPAD-scores per country for the module infrastructure & safety



Source: BYPAD-scores of 55 cities – see annex

Figure 14: BYPAD-scores per country for the module information & education



Source: BYPAD-scores of 55 cities – see annex

#### 2.2.4 Self-evaluation tool + learning from each other

As BYPAD has been developed as a Total Quality Management tool, the first goal of BYPAD is to be a self-evaluation tool which is detecting the weak and strong points of a city's cycling policy. At first place it is interesting to see if a city is making progress in cycling policy and why it is making progress.

This analysis is made by the evaluation group who is also supported by an external expert in cycling policy, the BYPAD-auditor. It is this quality management approach which is the strong added value of BYPAD. A city really gets an evaluation and improvement report based on opinions and visions of local actors and advices by the knowledge in other (BYPAD) cities which is implemented via the BYPAD-auditor.

As cities always feel some kind of competition element in doing this audit they always want to know how good they score compared to other cities. Like already explained above a comparison between cities of different countries is like comparing apples with lemons. **The only basis of comparison which is completely correct is comparing your BYPAD-scores with the former scores in your city and this way using BYPAD as a self-evaluation tool.**

A second basis of comparison which is still acceptable is comparing cities in one country. The audits were mostly done by the same auditor and the cycling culture is the same. In the tables below you find for example the comparison of the Czech, Belgian, Dutch and German cities. For those who know the cycling context in these countries, the hierarchy in quality of cycling policy looks correct. Based on these scores an extra motivation to become the best within one country is there.



Figure 15: BYPAD-scores in German cities

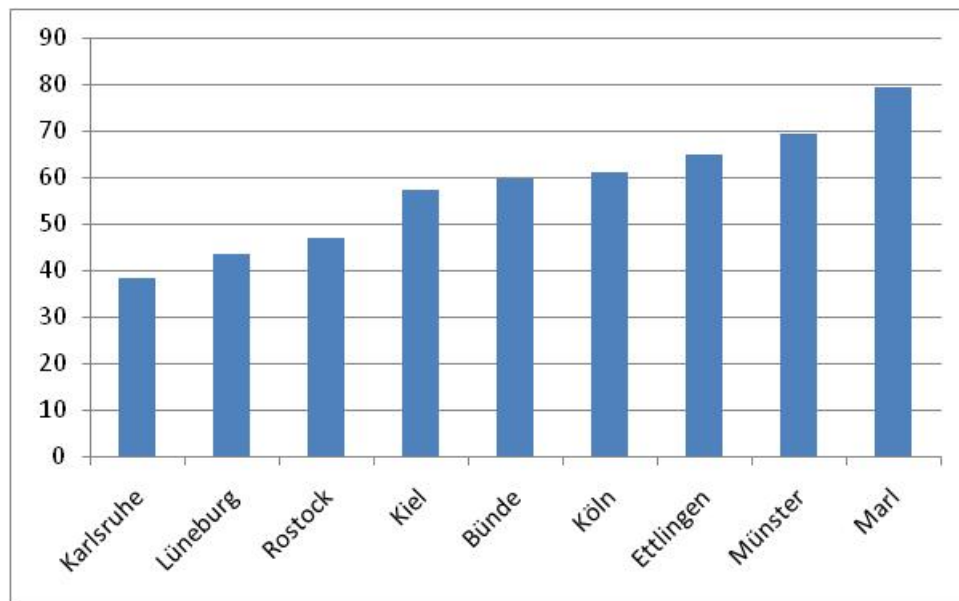


Figure 16: BYPAD-scores in Czech cities

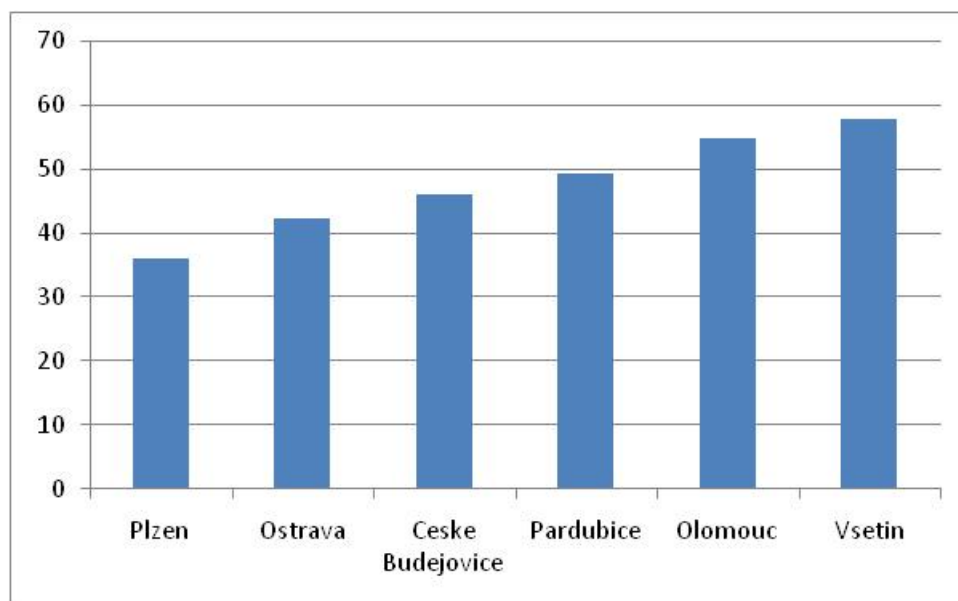


Figure 17: BYPAD-scores in Belgian cities

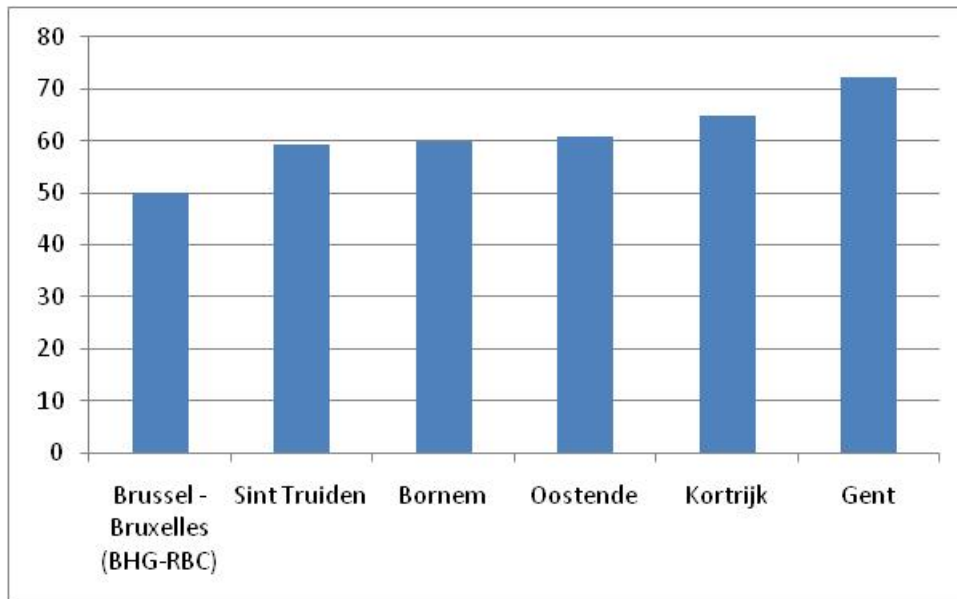
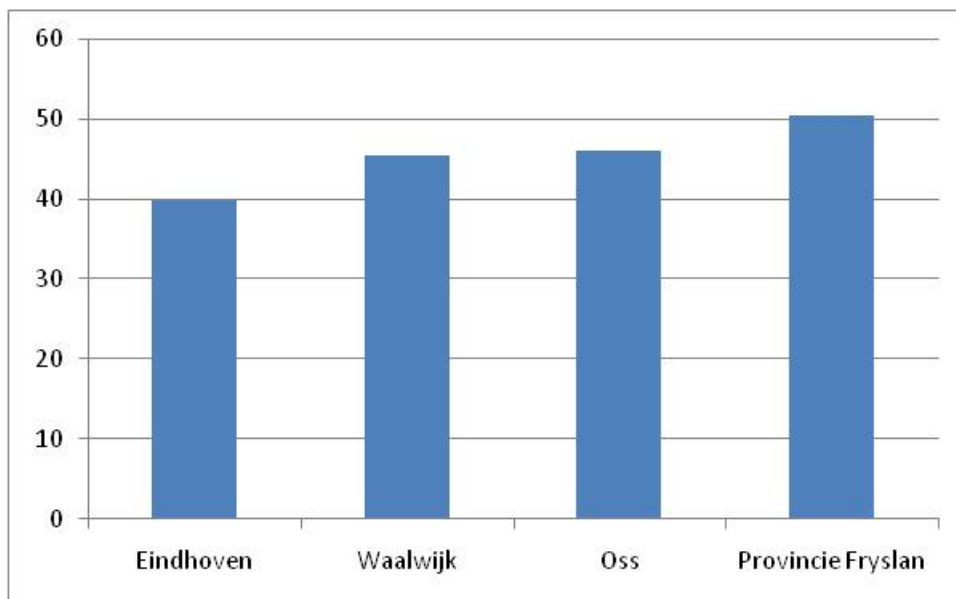


Figure 18: BYPAD-scores in Dutch cities



Of course a main goal of the whole BYPAD-network is to learn from other cities or regions. The exchange of experiences between auditors together and between cities / regions is an important aspect for improving its own cycling policy. The BYPAD-trainings, BYPAD-seminars, the BYPAD-website and the BYPAD-newsletters are the basis of this exchange of experience.

### 3 BYPAD: WHAT HAS BEEN ACHIEVED, WHAT NOT (YET)

By introducing the aspect of Total Quality Management in cycling policy, BYPAD wanted to recognise cycling policy as a serious and vital part of a city's or region's transport policy. BYPAD started as a research project financed by the European commission to develop a Total Quality Management Tool for cycling policy. During the stage of this research project nobody was sure that such a Total Quality Management Tool could make a difference for cycling policy in European cities. However at the end of the first BYPAD-project in 2001 all the partners were convinced that a strong instrument had been made with a lot of potential to **define a European quality standard for cycling policy**.

With the BYPAD-platform, as the final EU-funded project to support the development and dissemination of the cycle audit tool BYPAD, there has been has created a **pan-European network of around 100 cities, towns and regions in 21 European countries who actively invest in improving the quality of their cycling policy**. Via BYPAD **58 certified auditors** were trained to supervise the audit process and the city networks POLIS, Energie-Cité and ICLEI were involved in dissemination activities.

Through BYPAD both a serious quality improvement tool and a strong network of (cycling)cities/regions and cycling experts raised and the relevance of having an integrated cycling policy in cities/regions was proven. In the mean while **BYPAD has become the quality standard for cycling policy**. Different national and regional cycling strategies (e.g. Austria, Germany, Czech Republic, ...) are advising to use BYPAD as a quality management tool to improve the local cycling policy.

After these almost nine years of European support, BYPAD has become mature enough to stand on its own and to become a platform which wants to improve the quality of cycling policies and by this increasing cycle use and improving cycle safety by:

1. Implementing cycle audits in cities and regions
2. Exchanging cycling knowledge and expertise among members of the BYPAD-network (Auditors, cities, towns and regions).

#### 3.1 Results

##### ***Creation of an expert network of 58 BYPAD-auditors***

Via an intensive training programme a European wide network of 58 certified auditors has been created and this network of auditors has built a good reputation of being a group of experts in cycling policy. An important precondition of being a certified BYPAD-auditor is the 'lifelong' learning in the BYPAD-network. For staying a certified auditor you have to follow a training at least every two year on new elements in cycling policy and experiences with BYPAD.

### ***Introduction of total quality management in cycling policy***

BYPAD is a strong instrument with a good name recognition all over Europe. Via BYPAD the aspect of **Total Quality Management in cycling policy has been introduced** and it is now also recognized as an efficient method to improve local and regional cycling policies. As BYPAD initially is a self-evaluation tool to help improve the cycling policy of a city, region or town there has been given a lot of attention to the comparing of scores and results by these authorities. As the BYPAD-method is basically a qualitative approach and as the audits are also done by different auditors with other backgrounds it is however dangerous to directly compare the BYPAD-scores between different countries with each other. Although the BYPAD-partners continuously underlined that BYPAD is no beauty contest, the BYPAD-results also initiated a level of competition between cities, towns and regions.

### ***A European quality standard for cycling policy***

Cities, towns and regions that are willing to improve their cycling policy are also looking for standards, inspiration, effective policy measures for stimulating cycle use. Through BYPAD these authorities got a tailor made package of measures which are necessary to implement. This tailor made package is however the result of a standardized method which gives the European standard for the different quality levels you could reach in cycling policy. Based on BYPAD authorities can see which quality level or standard they already have reached and to which quality level or standard they should go for.

### ***Monitoring tool for cycling policy***

As BYPAD is at first place a self-evaluation instrument which helps to prepare an action programme for improving a city's or region's cycling policy it can easily be used as a monitoring tool to see what is the evolution of the city's cycling policy. The BYPAD-scores for each module clearly indicate the actual quality level and by repeating the same exercise every three to four years the progress in cycling policy can be detected.

### ***Knowledge centre for (starting) cycling cities/regions***

The BYPAD-network is covering the state of the art knowledge on possible measures and strategies to stimulate and facilitate cycle use. Especially new member states and cities which have a lack of expertise or personnel to start up clear cycle measures could rely on the support of the BYPAD-network to implement cycle measures.

## 3.2 Challenges

### ***European award for the best and most promising cycle cities***

Like already explained BYPAD is no tool to compare cities, regions from different countries with each other. Nevertheless the BYPAD where cause of some kind of competition elements amongst the BYPAD-cities as everybody wants to be the best. This competition element could form a basis for an acceleration of investments in cycling policy and therefore it would be a strong catalyst to deliver a European Award for the best cycling cities and most promising cycling cities in Europe. By nominating different cities it is possible to put not only the cities with the highest modal share of cycling in the picture, but also the climber cities and starting cities that in the near future will succeed in changing travel behavior drastically because of their efforts to invest in cycle measures.

### ***BYPAD-foundation***

To avoid that BYPAD will become the next EU-supported project which ends when the EU-support ends there should be given a continuation to the BYPAD-activities on permanent basis and not on project basis. A legal body (The BYPAD-foundation) can/will be formed for giving this continuation. The BYPAD-foundation will:

- support the implementation of BYPAD-audits
- organize the exchange of cycle knowledge through seminars, conferences, excursions
- communicate about BYPAD via a newsletter, website
- improve and update the BYPAD-tool
- train new and existing BYPAD-auditors
- hand over the BYPAD-certificates to the BYPAD cities, towns, regions

The financial basis of this foundation will come from membership fees of BYPAD-auditors and BYPAD cities, towns, regions.

To avoid that a new city-network organization will be created, an active co-operation with existing city-networks is necessary (POLIS, ICLEI, Energy-Cités, Eurocities, ...)

By having the European Cyclists' Federation as one of the founding members of this foundation a clear link to the users is created.

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## **ANNEXES**

- Annex I: Literature search bicycle use and influencing factors in Europe
- Annex II: city portraits BYPAD-cities