

# E-work and IT for developing rural areas in Hungary

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## Abstract

Information Technologies (IT) are a powerful driver for economy-wide productivity, growth and jobs – and are arguably Europe's best-bet investment for the future. They give great potential to transform the way in which we work, live and interact. The digital convergence of media and information services, networks and devices provide unique opportunities: for firms, to modernize their business processes and deliver a wide range of services; for consumers, for individuals to find and do remote e-work. The ratio of teleworkers compared to all employees is estimated to reach around 5% in Hungary today. The main objectives of the *New Hungary Development Plan* being the successor of NFT. Being part of the plan package, the Operative Program for the Development of the Economy significantly focuses on the support of the utilisation of ICT technologies and applications. This and the Hungarian Rural Development Strategy will support the exploitation of teleworking opportunities, thereby contributing to the employment of the disabled, persons with changed working capabilities and women.

## Key words

e-work, rural development, information technology, telework

## Introduction

The idea of e-work is closely linked to the development of the knowledge society in Europe. New wireless and display technologies change office equipment and design, and the nature of work itself changes in a knowledge economy where creativity and innovation became more important than simple productivity in routine tasks. 13% of the working population in the EU can be classified as e-workers. The concept of e-work extends the purely physical aspects of the European telework and US telecommuting concepts to include social dynamics; for example, the influence on how we work of factors such as networks of excellence, flexible working practices, roles and relationships between managers, workers and clients when working using ICT (Information and Communications Technology) tools.

With the appearance of wireless networks, we are increasingly seeing e-work practices incorporated into "local" and hybrid environments, roaming workers in a large office complex for example working together at the same time connected to their colleagues in another timezone.

Further growth of e-worker will be driven by the provision of new services over high-speed fixed and wireless networks making use of broadband and 3G mobile communications.

## ICT Access in Hungarian Households

As regards the use of PC and the internet in the Hungarian households, the most current data are supplied by the Hungarian records of the World Internet Project.

Data compared to all households	2004	2005	2006
Households with PCs	32%	31%	38%
Home internet connectivity	14%	15%	21%
Home broadband connectivity	6%	10%	15%

*Table 1: Basic indicators for home PC and internet access<sup>1</sup>*

Focusing on internet access, home connectivity shows smaller variation among the individual regions, while the comparison of settlement types reveals more significant differences.

Region	Internet connectivity, compared to all households
South Great Plain	17.4%
North Great Plain	14.4%
North Hungary	19.8%
Southern Transdanubia	17.1%
Western Transdanubia	21.1%
Central Transdanubia	21.8%
Central Hungary	28.8%

*Table 2: Ratio of households with internet connectivity per regions in 2006.<sup>2</sup>*

Settlement type	Internet connectivity, compared to all households
Village	14.1%
City	21.3%
Budapest	32.5%

*Table 3: Ratio of households with home internet connectivity per settlement types in 2006.<sup>3</sup>*

<sup>1</sup> Source: Galácz (editor), 2006

<sup>2</sup> Source: Galácz (editor), 2006

<sup>3</sup> Source: Galácz (editor), 2006

## On the spreading of telework in Hungary

The survey of the distribution of teleworkers per settlement types in Hungary shows a relatively balanced picture – despite the above disproportionateness:

Settlement type	Ratio of teleworkers
Village, community	20.6%
City (not county seat)	23.5%
County seat	29.4%
Budapest	26.5%

Table 4: ratio of teleworkers in Hungary compared to all teleworkers<sup>4</sup>

The ratio of teleworkers compared to all employees is estimated to reach around 5% in Hungary today. The presence of telework among individual organisation types, being the employers, was surveyed in a study of Budapest Business School.

<i>Does your organisation employ teleworkers?</i>						
	<i>Yes, for a long time</i>	<i>Yes, recently</i>	<i>No, but formerly, there were some</i>	<i>No, but the option is being considered</i>	<i>No, and it has never been an option</i>	<i>Total</i>
Large enterprises	3	3	3	12	79	100
Small and medium size businesses	26	13	4	15	347	405
<b>Total of business sphere:</b>	<b>29</b>	<b>16</b>	<b>7</b>	<b>27</b>	<b>426</b>	<b>505</b>
Local governments of districts and towns of county rank	1	-	-	4	20	25
Local governments of major cities	2	2	2	5	60	71
Minor local governments	1	1	-	1	153	156
Public administration bodies with national competence	-	-	-	1	9	10
<b>Total of public sphere:</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>11</b>	<b>242</b>	<b>262</b>
<b>Total:</b>	<b>33</b>	<b>19</b>	<b>9</b>	<b>38</b>	<b>668</b>	<b>767</b>

Table 5: Employment of teleworkers per organisation types (n=767)<sup>5</sup>

<sup>4</sup> Source: Honline Kommunikációs Kft, 2006

<sup>5</sup> Source: Eckert, 2006

## Institutional Background of Teleworking

In 2003, the Minister of Labour entrusted an *Telework Board* comprising five members with the development of a strategy for the introduction of teleworking in Hungary, the initiation of various projects and tenders, as well as the encouragement of cooperation among the government, the civil and competitive spheres. The Board of five members in the beginning has been added since then the representatives of the employer and employee sides of the Council for the Reconciliation of Interests, and the representatives of the IT and Communications portfolios (being administered by the Ministry of Economy and Transport), in addition those of the labour portfolio. The powers of the board extend mainly to the submission of proposals. Besides the development of a national strategy for teleworking, their activities are currently focused on the maintenance of the ongoing consultation with the representatives of the competitive sphere.

To ensure the professional background for the operation of the Teleworking Board, an *Teleworking Consultation Body* was established with consultation powers, and the participation of both the employee and employer sides. This body is responsible for ensuring a harmonised presentation of the various aspects in the teleworking program in agreement with the public, business, corporate and civil spheres, as well as the representatives of the media.

To promote the governmental tasks of the telework program, and as part of the Government Program “Esélyt a jövőnek” (Give Our Future a Chance<sup>\*\*\*</sup>) assigning highlighted role to teleworking, the Ministry of Employment and Labour (today: Ministry of Social Affairs and Labour - SzMM) established a Telework Centre within the *Budapest Labour Market Intervention Centre*<sup>6</sup> (Budapesti Munkaerőpiaci Intervenció Központ).

The centre operating under the professional supervision of SzMM participates in the development and conduct of governmental tasks and tenders related with telework. It closely cooperates with the labour and other state organisations, maintains liaison with the market oriented companies, non-profit organisations and local governments interested in teleworking. The aim of the centre is to promote, through the active participation of organisations and individuals interested in telework, the development of such a system of economic and social conditions, which may foster the large scale spreading of teleworking. A significant element of the activity of the Centre is the organisation of the National Telework Conference, which has taken place on a yearly basis, creating a tradition, with the most recent one held in December 2006, and which is considered to be the most significant and comprehensive effort in the area of teleworking.

The membership of the *Hungarian Telework Association*<sup>7</sup> holding its foundation meeting in August 2004 comprises primarily companies and organisations, which are interested in telework as a result of their activities. Pursuant to the association’s mission declaration, its aims, besides the representation of its members, include the followings:

- coordination among the economic players, the leaders of the economic policy, and the civil and professional organisations affected by the subject;
- contribution to the spreading of teleworking, as a work organisation method promoting the economy, in Hungary;
- promotion of the spreading of solutions supporting telework and applied teleworking models;

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<sup>6</sup> [www.bmik.hu](http://www.bmik.hu)

<sup>7</sup> [www.tavmunka.org](http://www.tavmunka.org)

- becoming a knowledge and information centre in topics related to telework;
- using its international connections, the promotion of the integration of Hungarian teleworkers in the international economic life; and
- integration in the works related to the legislative regulation of teleworking, and the development of a national strategy.

## Measures to Promote the Spreading of Telework

Hungary was pioneering by enforcing a *telework act*<sup>8</sup> as of 1 May 2004, whose provisions were incorporated in the Labour Code as part of a separate Chapter. Given that, as we have mentioned, this area was not yet regulated by the Community legislation, none of the EU member states had regulations specifically related to teleworking at that time. For the purposes of the Act, a teleworker is “*a worker performing activities within the employer's business profile at a place of their choice away from the employer's own premises, using computer technology and delivering the product by electronic means*”. It must be highlighted in the definition that telework is determined by way of a relation between an employer and an employee, that is in connection with a labour relation, thereby excluding persons performing such activities as self employers or in any other way from the scope of this law. The Act provides detailed regulation of various telework aspects different from the traditional employment regime, as well as aligns with the basic principles laid down in the European framework agreement by social partners, and intended mainly to eliminate discrimination.

Having regard to the experiences of the *FMM tender aimed at the establishment of teleworkplaces*, initiated at the end of 2002, and being the first considered successful<sup>9</sup> based on the participation rate, and the feedbacks from a wide range of entities winning the support, the Ministry has announced its actual invitation for tenders since 2004. As part of the program of 2004 intended to encourage the spreading of telework, modernise the work culture, develop flexible employment forms, and maintain the jobs created as part of the public administration reform, for example, 90 employers won non-refundable additional wage subsidy over a period of six months for the creation of 782 teleworkplaces altogether. In 500 cases, the jobs created as a result of the support were taken by persons belonging to groups paid special attention on the labour market (new entrants, registered unemployed, persons with disabilities, persons with changed working capacity, or persons bringing up their children alone or nursing relatives in need of attendance).

As regards its objectives and solutions, the *Hungarian Information Society Strategy* (Magyar Információs Társadalom Stratégia - MITS) created in 2003 pursues the European values and action methodology, taking into account the Hungarian specificities and opportunities. MITS sees the key to the enhancement of the country's competitiveness in the extension of the application of information and communications technologies. The wide application of these technologies, as well as their turning into production powers can guarantee the modernisation

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<sup>8</sup> Act XXVIII of 2004 amending the Labour Code of Hungary and other employment related acts

<sup>9</sup> Among former tenders, the followings should be mentioned:

- tender announced by the Ministry of Labour in February 1998 “for the promotion of the rehabilitative employment of persons with changed working capabilities, as part of computerised teleworking” with a budget of 100 million HUF, and

- tender of also 1998 “for the employment through teleworking of women raising their children at home, and becoming registered unemployed upon the discontinuation of the maternity allowance” with a total budget of 30 million HUF; and

- the experimental tender announced by the National Employment Public Fund in June 1999 “for the encouragement of combined teleworking, as an extension of employment” with a budget of 50 million HUF.

of the economy, the enhancement of the efficiency and competitiveness, and thereby, the achievement of a new stage of development, the objectives of the information society. The aim of the MITS – whose objectives, as well as programs intended for the achievement of the same were fully aligned, at their establishment, with the strategy and strategic programs of the European Union, that is the *eEurope+* and *eEurope2005* action plans – is to review and organise in a system the tasks related to the implementation of the information society, in order to ensure that the tasks resulting from the same are executed in a coordinated way by the whole of the society. Out of its so-called *Central Highlighted Programs*\*\*\*, the *E-ernyő* (E-Umbrella) program for the fostering of equal opportunities, and in particular, the program for the implementation of the *Public Network*\*\*\* (Közháló) in the public sphere (the establishment of a modern, broadband infrastructure), the *e-Government* program for public administration, and certainly, the *E-Work* program integrated in the Main Economic Direction have a significant effect on the domestic situation and possibilities of telework.<sup>10</sup> The latter program focuses on the social cohesion, the lowering of unemployment and the related human resources development, the development of efficient business (and primarily back office) processes, the development of up-to-date labour market services, and the renewal of the organisation of work in public administration.

In accordance with the European Union's expectations, the Hungarian Government also started the development of its National Broadband Strategy in 2003, which determined the tasks required in medium term. The aim of the *National Broadband Strategy* (Nemzeti Szélessávú Stratégia - NSzS) was to enable the spreading of broadband electronic communications, as well as the extension of the content provided in a widest possible group among the population, the companies and the public institutions. Pursuant to the fundamental proposition of the NSzS, the state should concentrate on the identification and elimination of restricting factors existent on the areas of accessibility, motivation, content provision, security and qualification. In the course thereof, the state may promote the elimination of factors hindering the spread of broadband internet connectivity through the application of regulatory, political and fiscal instruments, in order to ensure as much as possible the operation of the market mechanisms, the achievement of equal opportunities in the society, and the extension of innovation processes. The primary aim of the NSzS is to ensure that the access to broadband electronic services by both the population and the public institutions enable the spread of network communications, the extension of the content provided, the enhancement of the country's competitiveness, the strengthening of social cohesion, and ultimately, the dynamic development of the information society in Hungary. Accordingly, priority is given to the availability of broadband connection in the private and business sectors, while to comprehensive broadband connectivity in the public sector during the period until 2010 – corresponding to the time horizon of the MITS. As regards the population and the companies, the NSzS is targeted on the extension of the national broadband coverage, and as regards institutions financed from public funds, on the growth of the number of broadband connections.

The achievement of a wider range employment and the enhancement of the employment standards are of highlighted issues among the domestic employment policy issues as well. These formed the bases for one of the long term objectives – improvement of the living standards – of the National Development Plan (*Nemzeti Fejlesztési Terv - NFT*, 2004-2006). To achieve this, and the general objective related to it - lowering of the differences in revenues, as compared to the EU average -, it is very important to implement the specific

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<sup>10</sup>IHM: E-work. Spreading of the Culture of Electronic Work, 2003.; and Közháló. Development of a Modern Broadband Network Infrastructure, 2003. etc.

objectives determined under the employment policy, amongst others. Besides the better utilisation of human resources, the favourable development of the employment processes is also an essential condition of a more competitive economy and a more balanced regional development. Accordingly, the NFT considers the strengthening of employment and the development of the human resources as priority issues. The measures and tenders under the *Human Resources Development Operational Program* (Humánerőforrás-fejlesztés Operatív Program - HEFOP), being part of the NFT program package show coherence in many aspects with the objectives of the Hungarian Information Society Strategy. Such aspects include, in particular, the followings:

development of the abilities and competences required for a lifetime self-development;

development of the education and training infrastructure;

infrastructural development of the services supporting social adoption; and

health IT development specifically affecting the health-care sector in underdeveloped regions (4.4).

The main objectives of the *New Hungary Development Plan* (Új Magyarország Fejlesztési Terv - 2007-2013), being the successor of NFT, are the extension of employment and ensuring the conditions for a permanent development. Being part of the plan package, the Operative Program for the Development of the Economy (Gazdaságfejlesztési Operatív Program - GOP) significantly focuses on the support of the utilisation of IKT technologies and applications. This support "enables the exploitation of teleworking opportunities, thereby contributing to the employment of the disabled, persons with changed working capabilities and women".<sup>11</sup>

Although it is not explicitly included in the program, similar effects can be expected on other areas of inequality, and thereby, in connection with the differences in the IKT access among the individual regions and settlement types, as well as the access to telework opportunities originating from the same.

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<sup>11</sup> The Government of the Republic of Hungary (2006): Operative Program for the Development of the Economy, p. 53.

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