
Level of Adult Education in the European Union

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Abstract

Labor-market changes necessitate technological change products. The employment rate is influenced by the share of the young population. The economic environment is determined by the level of education of the population in a community. Thus, the labor market requires people with high skills. The article presents an analysis of the level of education of the population, related to three age groups. Knowing the level of education of the population is in favor of both the labor market and the education and training specialists. Job quality is higher when the population has a high level of education. At the same time, employment is more difficult for people with low levels of education. From this point of view, the article explores the evolution of the share of the population by education levels.

Keywords

European Union, adult education, level of education, training

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Introduction

The existence of people with high-level skills in a community is an advantage (Sarbu, et al., 2021). The experiences that those people have are important in making decisions (Androniceanu and Burlacu, 2017). Cooperation and interconnection contribute to the identification of solutions, as a result of specific or common challenges (UNESCO, 2019). Big cities have in mind social development, economic growth, equity and inclusion, as well as environmental sustainability. Thus, learning cities want to solve environmental problems and stimulate regional growth. It is considered that in order to achieve these goals it is necessary to increase the level of education of the adult population (Webb, et al., 2020). Considering population stratification by level of education, may be useful some intergenerational educational mobility (Gabay-Egoza and Yaishb, 2019).

Development of European regions can be influenced by the interest shown by each region for updating the skills of the population (Sarbu, et al., 2021). Failure to apply measures in this regard creates development gaps. The skills required by the labour market can be acquired through the participation of adults in education and training programs (Radulescu, et al., 2021). Thus, lifelong learning can lead to a higher quality of the education and training process, as well as to an increase in the attractiveness of education and training programs (Costache, et al., 2015).

The development and sustainability of vocational training programs can be achieved through an adequate understanding of the beliefs and attitudes of adult learners (Willis, 2021). Thus, certain adversities manifested in the educational process during childhood are later transmitted to adult education. For adults, an investment in education and an improvement in educational prospects can

lead to an extension of professional life and participation in the workforce at any age (Lorenti, et al., 2020).

To the extent that staff reductions are caused by increased automation, reorganization and retraining skills within a company is one of the important challenges. Large enterprises are considered to be better prepared for transformation than small enterprises. Recruitment of workforce to meet new demands is more difficult for small producers because they are usually located in rural, sparsely populated. Thus, they face difficulties for competent staff in terms of competition with larger companies. A solution that small businesses have on hand is the possibility of retraining existing staff (Rangraz and Pareto, 2020). Over time, educational practices have become increasingly effective. Integration of different perspectives in various fields has created the opportunity of modeling educational practices. Creating supportive environments, based on intensive training and equitable resources, can lead to a healthy and strong development of the educational process. Among the main beneficiaries of such a vision are adults, through education and training programs in which they can participate (Darling-Hammond, et al., 2020).

Literature review

It is considered that people with basic skills can easily identify and occupy an even more stable quality job (Burlacu and Jiroveanu, 2009). Thus, they are able to actively participate in economic and social life of a community. A feature that can still influence access to education and training, respectively to the labour market, is given by the domicile in rural areas. For them, access to quality infrastructure and services is important (Stoica and Burlacu, 2017). It is found that in an active life, a person changes his job or even his profession several times (Burlacu, et al., 2021). Thus, it becomes increasingly important adult participation in education and training programs held throughout life (Burlacu, et al., 2013).

Under these conditions, knowing the level of education of the population becomes very important. The analysis performed on different age groups can be a mirror of the situation in the field. Employment and economic performance are influenced by the demographic situation of each community (Radulescu, et al., 2020). It is believed that the economic, cultural and educational resources of parents can influence the socio-economic and educational outcomes of children. They also have a further influence on the manifestation of interest in adult education (Prix and Erol, 2017). It is believed that due to digitization and automation, some of the current jobs will disappear. People with a lower level of qualification will be more affected in finding and keeping a job (Profiroiu, et al., 2020). The use of information technology will be higher and higher. One of the advantages of participating in adult education programs is given by social progress. Thus, the growth of the knowledge economy can be achieved through adult education (Van Nieuwenhove and De Wever, 2021).

In the last year, blended learning is an increasingly used solution in the development of education and training programs (Burlacu, 2011-2021). This way of learning is recommended for people in rural areas, people in the workplace, prisoners with family responsibilities (Gjestvang, et al., 2021).

Parents with high levels of qualification pass on a certain interest in learning to their children as well. Thus, their subsequent degree of adaptation is positively influenced. Participation and involvement in various academic and non-academic experiences will allow a degree of adaptation and easier orientation to their entry into the labour market (Matsuoka, 2019). It is found, especially recently, that adult learning opportunities have increased through media and information literacy programs (Yang, et al., 2021). Especially in the current context, blended learning creates a symbiosis between formal learning and informal learning. The development of their own skills, of key competencies, will make people, regardless of the level of education, act sustainably (Cebrián, et al., 2020). Knowledge-based societies will transform skills and knowledge into today's societies. New technologies will change the way people work and live. This development will also influence adult education. The development of post-industrial societies depends on the solutions identified for social, technological and environmental problems. By developing creativity, educational systems can contribute to the generation of effective solutions (Gulliksen, 2018).

Methodology of research

The aim of this research was to provide a clear picture of the level of education of the adult population in the member countries of the European Union. An analysis of the level of education of the population for the period 2004-2019 is provided. It also presents the comparative situation of the level of education of the population between 15 and 64 years, for 2019. At the same time, an analysis of the evolution of the share of the population with levels 3-8 of education, for the period 2004-2019 was performed.

Results and discussions

It is becoming increasingly important to know the level of education of the population. Both employment and economic outcomes are influenced by the level of education of members of a community. The following table presents the comparative situation (2004-2019) of the share of the level of education of the population aged between 15 and 64 years (%).

Table no. 1. Comparative situation of the share of the level of education (15-64 years)

From 15 to 64 years	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2004	2019	2004	2019	2004	2019
European Union	35,6	25,7	46,2	46,3	18,2	27,9
Belgium	37,8	25,9	35,4	38,1	26,8	36,0
Bulgaria	34,0	21,9	48,1	53,5	17,9	24,7
Czechia	17,6	12,3	72,0	66,1	10,4	21,6
Denmark	25,3	26,1	46,7	40,8	27,9	33,1
Germany	23,6	19,5	55,3	54,5	21,1	26,0
Estonia	20,3	15,8	54,0	47,7	25,6	36,5
Ireland	38,3	21,0	36,8	38,3	24,9	40,7
Greece	40,9	25,9	41,6	46,3	17,5	27,8
Spain	54,5	39,6	21,0	25,3	24,5	35,1
France	36,3	23,4	41,0	42,9	22,7	33,7
Croatia	30,4	18,1	56,4	59,9	13,2	22,0
Italy	51,8	39,8	38,1	42,8	10,0	17,4
Cyprus	39,2	21,5	35,1	38,5	25,7	40,0
Latvia	24,5	14,9	59,0	53,8	16,5	31,4
Lithuania	21,6	11,1	56,8	51,0	21,6	37,9
Luxembourg	40,3	26,7	38,9	32,3	20,8	41,0
Hungary	29,3	20,0	56,5	57,6	14,2	22,5
Malta	74,0	41,3	15,8	32,1	10,2	26,7
Netherlands	33,3	25,5	41,1	39,7	25,7	34,8
Austria	24,7	18,7	59,8	50,2	15,4	31,1
Poland	23,0	13,3	64,2	58,5	12,8	28,2
Portugal	73,7	47,6	15,5	28,7	10,8	23,8
Romania	34,5	25,1	56,8	58,9	8,7	16,0
Slovenia	24,4	15,8	59,9	54,9	15,7	29,3
Slovakia	20,7	14,5	68,9	62,3	10,4	23,1
Finland	27,8	16,9	43,9	44,6	28,3	38,5
Sweden	21,5	20,8	53,8	41,5	24,7	37,8

Source: own processing according to data published by Eurostat (2021)

From the data presented in the previous table, compared to 2004, in 2019, it is observed that only in Denmark the share of the population with 0-2 education levels increased, in the other countries these values decreased. The most significant decreases were registered in: Malta (-32.7%), Portugal (-26.1%), Cyprus (-17.7%), Ireland (-17.3%), Greece (-15%), Spain (-14.9%). In 2019, approximately 40% of the population had a level of education between 0 and 2 in: Portugal (47.6%), Malta (41.3%), Italy (39.8%), Spain (39.6 %). Compared to 2004, in 2019, the largest increases in the share of the

population with an education level between 3 and 4 are registered in: Malta (+16.3%), Portugal (+13.2%), Bulgaria (+5.4%), Italy (+4.7%), Greece (+4.7%), Spain (+4.3%). At the same time, for the same period, there were decreases in values: Sweden (-12.3%), Austria (-9.6%), Slovakia (-6.6%), Luxembourg (-6.6%), Estonia (-6.3%). In the period 2004-2019, in all European Union countries there were increases in the share of the population with education levels 5-8. Increases of over 15% were recorded: Luxembourg (+20.2%), Malta (+16.5%), Lithuania (+16.3%), Ireland (+15.8%), Austria (+15.7%), Poland (+15.4%). Lower increases were: Germany (+4.9%), Denmark (+5.2%), Bulgaria (+6.8%), Romania (+7.3%), Italy (+7.4%). However, in 2019, in three countries, more than 40% of the population aged 15 to 64 had an education level of 5 to 8. These are: Luxembourg (41.0%), Ireland (40.7%) and Cyprus (40.0%).

The following table presents the comparative situation (2004-2019) of the share of the level of education of the population aged between 20 and 24 years (%).

Table no. 2. Comparative situation of the share of the level of education (20-24 years)

From 20 to 24 years	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2004	2019	2004	2019	2004	2019
European Union	22,6	16,5	66,1	66,6	11,3	16,9
Belgium	18,2	14,4	60,8	57,8	21,0	27,8
Bulgaria	23,9	15,6	69,7	78,2	6,4	6,3
Czechia	8,6	11,7	87,4	78,0	4,0	10,4
Denmark	23,8	24,4	70,5	66,7	5,7	8,9
Germany	27,2	22,5	68,6	68,6	4,2	8,8
Estonia	20,0	15,2	67,1	70,0	12,9	14,8
Ireland	14,7	5,9	59,1	66,8	26,2	27,3
Greece	16,6	5,5	75,2	84,1	8,2	10,4
Spain	38,9	26,0	39,8	50,4	21,3	23,6
France	17,3	11,5	53,9	56,2	28,8	32,4
Croatia	6,5	2,7	88,7	85,6	4,8	11,7
Italy	27,5	18,0	69,7	71,9	2,8	10,1
Cyprus	22,4	7,7	57,6	63,0	20,0	29,3
Latvia	21,7	12,9	67,3	76,4	11,0	10,8
Lithuania	14,5	7,5	69,9	73,6	15,6	18,9
Luxembourg	27,5	22,5	59,7	55,6	12,8	21,9
Hungary	16,5	13,4	76,8	78,8	6,7	7,7
Malta	49,0	21,9	37,6	56,0	13,4	22,1
Netherlands	25,0	17,8	60,8	61,2	14,2	21,0
Austria	14,6	12,7	79,1	58,4	6,3	28,9
Poland	9,1	9,2	84,0	78,0	6,9	12,8
Portugal	50,2	17,1	42,7	60,8	7,1	22,0
Romania	24,7	16,6	70,4	76,2	4,9	7,2
Slovenia	9,5	7,6	87,0	81,7	3,4	10,7
Slovakia	8,3	10,1	86,6	74,1	5,1	15,8
Finland	15,5	11,8	80,9	81,7	3,6	6,5
Sweden	14,0	15,4	75,7	65,5	10,3	19,1

Source: own processing according to data published by Eurostat (2021)

From the previous table, compared to 2004, in 2019, it is observed that the share of the population with education levels 0-2 increased in: Czechia (+3.1%), Slovakia (+1.8%), Sweden (+1.4%), Denmark (+0.6%), Poland (+0.1%). In the other countries these values have decreased. The largest decreases were registered in: Portugal (-33.1%), Malta (-27.1%), Cyprus (-14.7%), Spain (-12.9%), Greece (-11.1%), Italy (-9.5%). In 2019, less than 10% of the population had an education level between 0 and 2 in: Croatia (2.7%), Greece (5.5%), Ireland (5.9%), Lithuania (7.5%), Slovakia (7.6%), Cyprus (7.7%), Portugal (9.2%). Compared to 2004, in 2019, the largest increases in the share of the population with

an education level between 3 and 4 are registered in: Malta (+18.4%), Portugal (+18.1%), Spain (+10.6%), Latvia (+9.1%), Greece (+8.9%), Bulgaria (+8.5%). At the same time, for the same period, there were decreases in values: Austria (-20.7%), Slovakia (-12.5%), Sweden (-10.2%), Czech Republic (-9.4%), Poland (-6.0%).

In the period 2004-2019, in all European Union countries there were increases in the share of the population with education levels 5-8, less in Latvia (-0.2%) and Bulgaria (-0.1%). At the same time, the lowest increases were recorded in: Hungary (+1.0%), Ireland (+1.1%), Estonia (+1.9%), Greece (+2.2%), Spain (+2.3%), Romania (+2.3%). The highest increases were recorded in: Austria (+22.6%), Portugal (+14.9%), Slovakia (+10.7%), Cyprus (+9.3%), Luxembourg (+9.1%), Malta (+8.7%). However, in 2019, in five countries, more than 25% of the population aged 20-24 had a level of education between 5 and 8. These are: France (32.4%), Cyprus (29, 3%), Austria (28.9%), Belgium (27.8%), Ireland (27.3%).

Table no. 3. Comparative situation of the share of the level of education (55-64 years)

From 55 to 64 years	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2004	2019	2004	2019	2004	2019
European Union	47,1	29,0	37,6	48,4	15,3	22,6
Belgium	54,7	32,8	25,3	36,4	20,0	30,8
Bulgaria	44,6	18,8	38,2	57,6	17,2	23,6
Czechia	17,8	8,6	72,0	73,7	10,2	17,7
Denmark	24,5	24,5	48,7	44,8	26,8	30,8
Germany	21,1	13,4	56,1	59,6	22,8	26,9
Estonia	20,6	7,9	50,9	52,3	28,5	39,9
Ireland	61,0	31,9	23,2	35,9	15,9	32,2
Greece	68,0	40,1	20,7	36,8	11,3	23,1
Spain	78,7	52,3	9,0	21,0	12,4	26,7
France	50,6	30,6	34,6	45,0	14,9	24,4
Croatia	46,0	25,5	39,4	56,4	14,6	18,1
Italy	71,8	49,7	20,7	37,5	7,5	12,8
Cyprus	60,6	31,2	25,0	41,3	14,3	27,5
Latvia	29,0	5,9	52,4	66,3	18,6	27,8
Lithuania	31,8	3,5	50,8	66,1	17,3	30,4
Luxembourg	49,6	33,5	34,6	35,7	15,8	30,8
Hungary	42,9	19,3	42,7	61,5	14,4	19,2
Malta	87,0	68,1	4,5	19,0	8,5	12,9
Netherlands	41,5	30,9	34,6	38,1	24,0	31,0
Austria	30,9	19,6	54,7	55,2	14,4	25,2
Poland	33,7	10,6	54,2	73,4	12,1	16,0
Portugal	88,4	69,5	4,9	15,4	6,7	15,1
Romania	55,8	25,8	36,0	64,8	8,2	9,4
Slovenia	31,5	18,6	53,3	59,7	15,1	21,7
Slovakia	26,8	11,5	62,6	72,4	10,6	16,1
Finland	41,2	14,6	33,1	44,5	25,7	40,9
Sweden	29,5	18,3	46,4	49,6	24,0	32,1

Source: own processing according to data published by Eurostat (2021)

Compared to 2004, in 2019, it is observed that only in Denmark the share of the population aged between 55 and 64, with education levels 0-2, remained unchanged. In the other countries these values have decreased. The most significant decreases were registered in: Romania (-30.0%), Cyprus (-29.4%), Ireland (-29.1%), Lithuania (-28.3%), Greece (-27.9%), Finland (-26.6%), Spain (-26.4%). In 2019, over 50% of the population aged 55 to 64 had a level of education between 0 and 2 in: Portugal (69.5%), Malta (68.1%), Spain (52.3%).

Compared to 2004, in 2019, the largest increases in the share of the population aged between 55 and 64, with an education level between 3 and 4, are registered in: Romania (+28.8%), Bulgaria (+19.4%),

Poland (+19.2%), Hungary (+18.8%), Croatia (+17.0%). Denmark is the only country where the share of the population aged 55-64, with an education level between 3 and 4, has decreased (-3.9%). Moderate increases were: Austria (+0.5%), Luxembourg (+1.1%), Estonia (+1.4%). In the period 2004-2019, in all European Union countries there were increases in the share of the population aged between 55 and 64, with education levels 5-8. Increases of over 10% were recorded in: Ireland (+16.3%), Finland (+15.2%), Luxembourg (+5.0%), Spain (+14.3%), Cyprus (+13.2 %), Lithuania (+13.1%), Greece (+11.8%), Estonia (+11.4%), Austria (+10.8%), Belgium (+10.8%).

Lower increases (less than 5%) had: Romania (+1.2%), Croatia (+3.5%), Poland (+3.9%), Denmark (+4.0%), Germany (+4.1%), Malta (+4.4%), Hungary (+4.8%). However, in 2019, countries where over 30% of the population aged 55 to 64 had an education level between 5 and 8 are: Finland (40.9%), Estonia (39.9%), Ireland (32.2%), Sweden (32.1%), Netherlands (31.0%), Belgium (30.8%), Denmark (30.8%), Luxembourg (30.8%), Lithuania (30.4%).

Often people's participation in adult education is influenced by certain experiences they have had in the educational process during childhood or adolescence. There are situations in which the student-teacher relationship has allowed an individualized study, as is the case of certain rural communities (Starrett et al., 2021). For 2019, the comparative situation of the level of education of the population between 15 and 64 years is presented in the following figure.

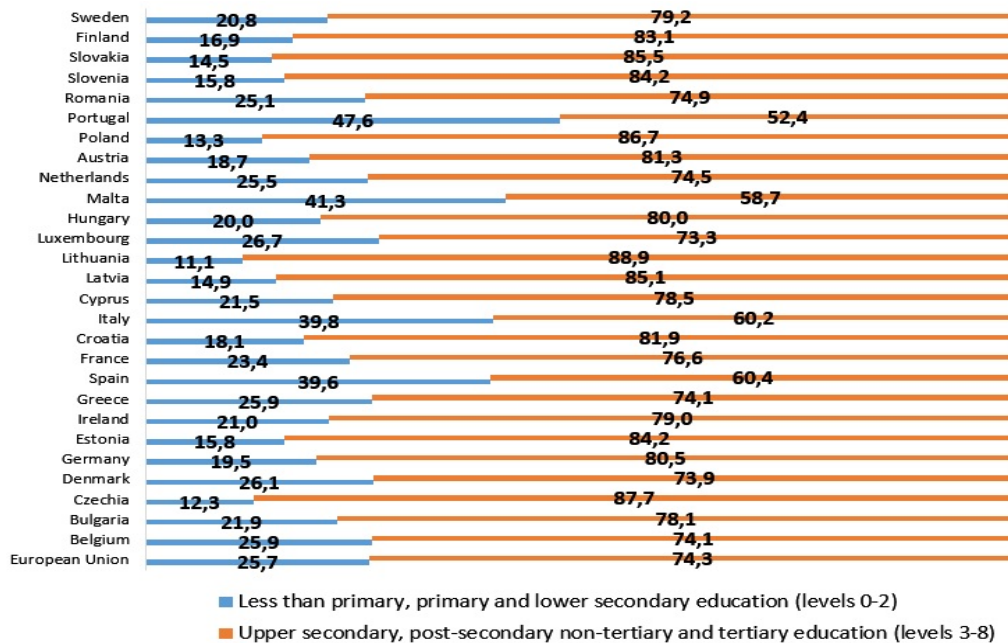


Figure no. 1. Comparative situation of the level of education of the population 15-64 years

Source: own processing according to data published by Eurostat (2021)

Thus, for 2019, it is observed that over 30% of the population aged 15-64 has a level of education between 0 and 2 (Less than primary, primary and lower secondary education) in: Portugal (47.6 %), Malta (41.3%), Italy (39.8%), Spain (39.6%). Also, over 85% of the population aged 15-64 have a level of education between 3 and 8 (Upper secondary, post-secondary non-tertiary and tertiary education) in: Lithuania (88.9%), Czechia (87.7%), Poland (86.7%), Slovakia (85.5%), Latvia (85.1%). For the European Union, the following figure shows the evolution of the share of the population with levels 3-8 of education (2004-2019).

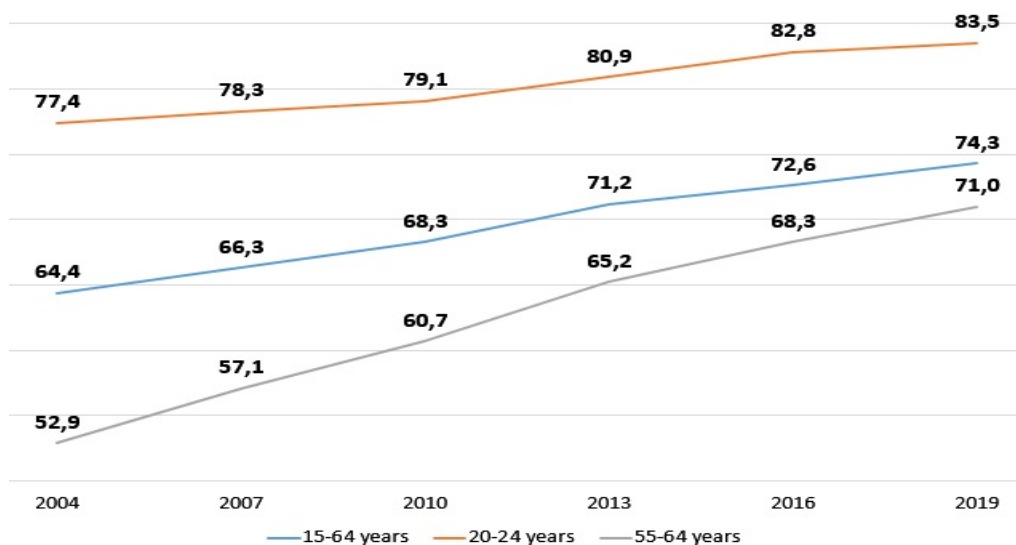


Figure no. 2. Evolution of the share of the population with levels 3-8 of education, for the period 2004-2019, European Union (15-64 years, 20-24 years, 55-64 years)

Source: own processing according to data published by Eurostat (2021)

From the data presented, it is observed that for each age group the weights recorded increases in values. Thus, for the age group 20-24 years, compared to 2004, in 2019 the increase was 6.1%. For the age group 15-64 years, compared to 2004, in 2019 the increase was 9.9%, and for the age group 55-64 years, compared to 2004, in 2019 the increase was 18.1%. Even if there is a small increase for the age group 20-24 years, still the population in this age group, in 2019, registers the highest values (83.5%).

Conclusions

Automation and digitization have influenced jobs. For this reason, the need arose to acquire new skills or to update those skills that people already had. The results of the analyses show that, compared to 2004, in 2019, it is observed that the share of the population with education levels 0-2, regardless of age, decreased in most countries in the European Union. But in 2019, in four countries about 40% of the population aged 15 to 64 had a level of education between 0 and 2 (Portugal, Malta, Italy, Spain). For the same period of time, in most European Union countries there have been increases in the share of the population with education levels 5-8. In 2019, in three countries, over 40% of the population aged between 15 and 64 had an education level between 5 and 8 (Luxembourg, Ireland, Cyprus).

A high share of the population with a high level of education allows active participation in the economic and social life of the communities of which it is part. To ensure high productivity, the maximum use of the skills of employees is a desire of any company. Maintaining high labor productivity, as well as increasing it, can only be achieved with people with high skills (OECD, 2013). It is found that computer use in the workplace allows people to have higher levels of competence. For this reason, communities should be more involved in facilitating access to learning opportunities for people who do not fall into the category of people who have access to computers (Ertl et al., 2020).

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