



Final pilot report

General data	
Project partner	Vysocina Region
Pilot name	Verifying demand for new connections of public bus transport, interconnecting rural peripheral areas with insufficient transport services, in the context of a territory with dispersed settlement structure
Pilot location	<p>NUTS 0: CZ, Czech Republic NUTS 1: CZ0, Česká republika NUTS 2: CZ06, Jihovýchod NUTS 3: CZ063, Kraj Vysočina</p> <p>The pilot was carried out in the following localities:</p> <ul style="list-style-type: none"> ○ cities of Jihlava and Třebíč and rural municipalities within their hinterlands ○ cities of Jihlava and Havlíčkův Brod and rural municipalities within their hinterlands ○ town of Velké Meziříčí and rural municipalities within its hinterlands ○ rural area in the surrounding of municipalities of Světlá nad Sázavou and Lipnice nad Sázavou
Person(s) responsible for pilot implementation	Pavel Bartoš Radek Handa Lenka Matoušková
Pilot starting date	1 March 2017
Pilot ending date (if applicable)	30 June 2018
Author of the final report	Lenka Matoušková

Reported period

Steps undertaken in period March 2018 – June 2018
<p>Throughout the monitored period, the Vysocina Region continued implementation of the pilot measures to improve accessibility of rural areas in the region, by means of operating new public bus transport connections on the following lines:</p> <ul style="list-style-type: none"> ○ line No. 790250 Jihlava – Brtnice – Okříšky – Třebíč ○ line No. 840212 Velké Meziříčí – Chlumecko ○ line No. 600620 Světlá nad Sázavou – Lipnice nad Sázavou ○ line No. 760600 Jihlava – Havlíčkův Brod <p>These connections were ensured by 4 public bus transport operators (ARRIVA Východní Čechy,</p>



a.s., ICOM transport, a.s., TRADO-BUS s.r.o., ZDAR, a.s.) on the basis of long-term contracts with the Vysocina Region on public service commitment.

In the reported period (March 2017 – June 2018), the pilot buses covered a total distance of almost 52 000 kilometres and transported more than 25 000 passengers.

Pilot connections co-financed by RUMOBIL				
Period 3 - 6/2018 (Arriva 4 - 6/2018*)				
<i>Line</i>	<i>Operator</i>	<i>Number of connections</i>	<i>Number of kilometres</i>	<i>Number of passengers</i>
840212	ZDAR	3	7 052	2 849
600620	ARRIVA	6	2 088	5 616
760600	ICOM	15	23 175	10 799
790250	TRADOBUS	10	19 532	5 906
Total		34	51 847	25 170

* seasonal character of operation, from April till October

Source of data: monthly statements on passenger numbers per operator and per connection, public bus transport timetables (available at www.idos.cz)

The pilot implementation in this period cost 1,293 mil. CZK (ca. 50 048 EUR), financed by the RUMOBIL budget and the Vysocina Region own resources. In accordance with Czech legislation on public transport services, this amount is to be understood not as actual costs of the bus connections' operation, but as a payment by means of which the region compensates to the transport operators their provable loss – the balance between their real costs and revenues.

However, the end of the pilot period does not mean that operation of the above mentioned connections will cease after 30 June 2018. The introduced connections will continue, as foreseen by the valid contracts between the region and the relevant operators, and, in the future, they are expected to be included into the emerging regional integrated transport system – “Public Transport of Vysocina”.

Difficulties encountered and solutions found in reporting period

Generally, the pilot implementation in the monitored period had been running smoothly, as foreseen at the project planning phase.

Difficultes encountered so far concern, in particular, financial aspects of the pilot implementation, namely:

- constantly rising costs of public transport as a whole, which has been observed in the Vysocina Region over a longer period of time. Rising costs are due to several reasons, such as higher mobility needs of population, increasing operation costs caused by higher prices of fuel or decline in revenues from fares as a result of low passenger numbers. Another reason, that occurred during the pilot implementation and affected the whole Czech Republic, was significant increase in labour costs of bus drivers in 2017.
- development of CZK/EUR conversion rates, which influences the financial flows, because the pilot costs are paid in CZK, while the EU contribution is refunded in EUR. Since the project planning phase (2015/2016), the Czech currency has strongly appreciated, meaning that the available RUMOBIL allocation was, in practice, able to finance the pilot for a shorter period of time than expected before the project submission.

Despite the mentioned difficulties, the pilot implementation was duly ensured till June 2018, as previously planned and foreseen in the approved Application Form. Since the available RUMOBIL



share for this activity had been depleted, the remaining costs were covered by the regional own resources.

Final results

Resource requirements (planned versus actual)

To sum up the whole pilot period (March 2017 – June 2018), there was a total of 34 newly introduced public bus transport connections, operated on 4 existing lines, both on working days and at weekends, by 4 bus transport operators.

PILOT IMPLEMENTATION SUMMARY			
<i>Operator</i>	<i>Line</i>	<i>No. of pilot connections</i>	<i>Frequency</i>
ICOM transport, a.s.	760600 Jihlava – Havlíčkův Brod	15	working days, weekends
TRADO-BUS s.r.o.	790250 Jihlava – Brtnice – Okříšky – Třebíč	10	weekends
ARRIVA Východní Čechy, a.s.	600620 Světlá nad Sázavou – Lipnice nad Sázavou	6	weekends
ZDAR, a.s.	840212 Velké Meziříčí – Chlumek	3	working days

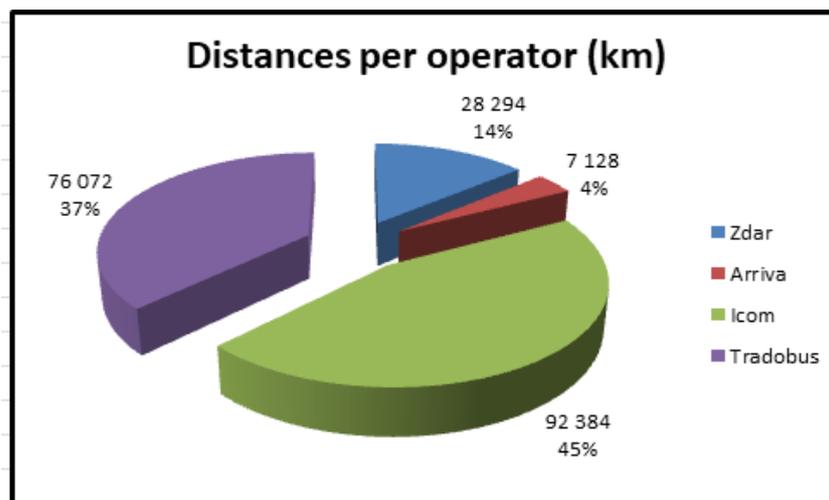
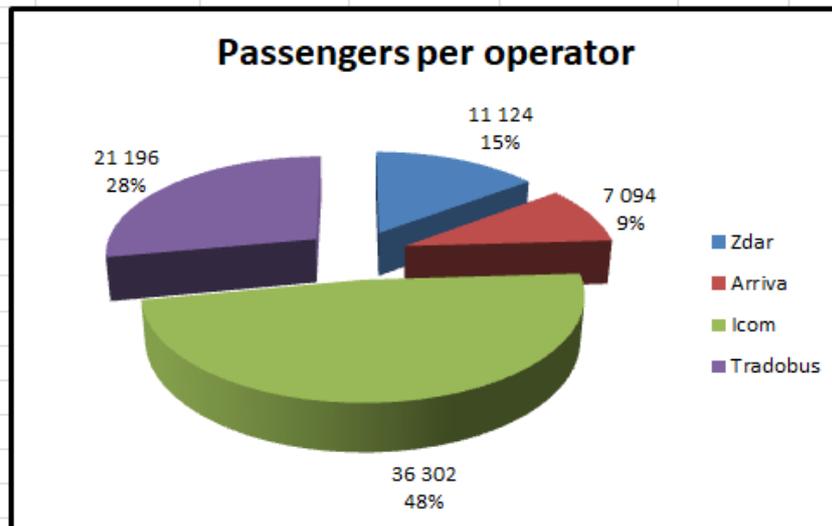
During this period, buses on pilot connections covered a total distance of almost 204 000 kilometres and transported more than 75 000 passengers.

SUMMARY OF PILOT PERIOD, 3/2017 - 6/2018				
<i>Line</i>	<i>Operator</i>	<i>No. of pilot connections</i>	<i>Number of kilometres</i>	<i>Number of passengers</i>
840212	ZDAR	3	28 294	11 124
600620	ARRIVA*	6	7 128	7 094
760600	ICOM	15	92 384	36 302
790250	TRAD-OBUS	10	76 072	21 196
Total		34	203 878	75 716

* seasonal character of operation, from April till October



The biggest shares of both passengers and kilometres belong, logically, to operators who ran most connections (Icom, Trado-bus).



The pilot preparation, implementation and evaluation required, in particular, time, personnel and financial resources.

1) Time resources

- planning phase: mid 2015 – end of 2016
- implementation phase: March 2017 – June 2018
- evaluation phase: July – October 2018

2) Personnel resources

The pilot as well as the whole RUMOBIL project implementation is being ensured by relevant departments of the Regional Authority of the Vysocina Region, the executive body of the Vysocina Region, that performs tasks defined by the regional decision-making organs (the assembly, the council).

The *Department of Regional Development* is responsible for the overall project management and coordination, both for the activity part and financial aspects, including communication and PR issues. It ensures communication with the project Lead partner and WP leaders, as well as with external experts and the national FLC body. The team consists



of Iveta Fryšová (main coordinator), Lenka Matoušková (project manager) and Božena Šprynarová (financial manager).

The *Department of Transport and Road Administration*, especially its section of transport services, answers for the technical part of the project. Concerning the pilot implementation, this department ensured and coordinated the whole activity from its planning phase (identification and selection of pilot measures, contracting the public transport services, communication with transport operators), over implementation (collection and monitoring of relevant data), up to the final phase and evaluation of the pilot results. Besides the pilot test, this department provided necessary expertise for other key project activities, such as the RUMOBIL Strategy or the public transport demand prognosis. Key team members are Radek Handa and Pavel Bartoš.

3) Financial resources

As foreseen by the Interreg CENTRAL EUROPE implementation rules, the Vysočina Region ensures full pre-financing of all activities, with the EU contribution to be refunded later after successful verification process by the FLC and the JS.

The share of the RUMOBIL budget allocated the amount of EUR 108 750 for pilot implementation. Total costs, meaning total compensation to the transport operators by the region (as explained above), reached more than 4 mil. CZK / approx. 159 000 EUR¹.

The detailed breakdown for the pilot period (March 2017 – June 2018) is listed in the table below.

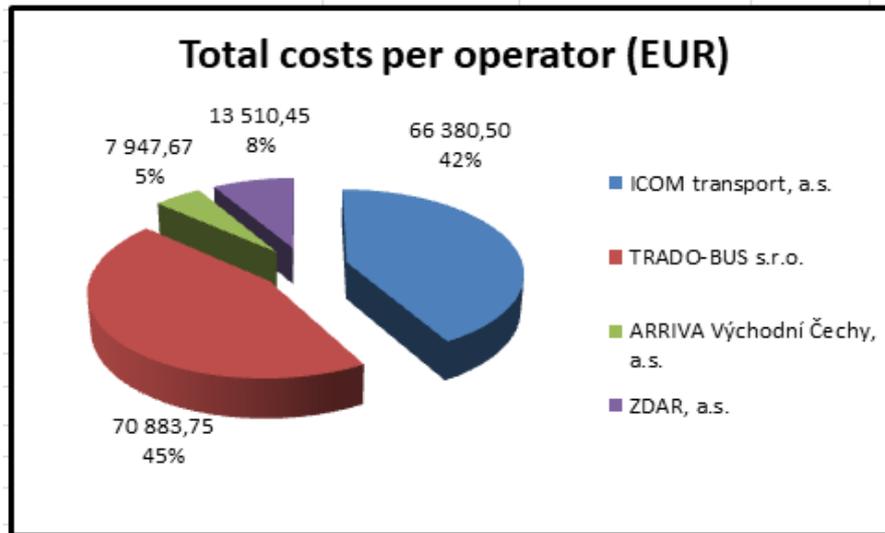
Three of the four operators were running the pilot connections throughout the whole pilot period; the pilot line of the operator ARRIVA Východní Čechy has a seasonal character and was not operated in the winter months.

TOTAL COSTS OF PILOT IMPLEMENTATION PER OPERATOR		
Operator	Total CZK	Total EUR
ICOM transport, a.s.	1 199 666,66	46 510,81
TRADO-BUS s.r.o.	1 210 662,56	46 936,91
ARRIVA Východní Čechy, a.s.	141 433,72	5 509,12
ZDAR, a.s.	225 500,00	8 768,82
Subtotal (RUMOBIL share)	2 777 262,94 CZK <i>EU contribution</i> 2 360 673,50 (85 %) <i>Co-financing</i> 416 589,44 CZK (15 %)	107 725,66 EUR <i>EU contribution</i> 91 566,81 EUR (85 %) <i>Co-financing</i> 16 158,85 EUR (15 %)
ICOM transport, a.s.	513 333,32	19 869,69
TRADO-BUS s.r.o.	618 666,64	23 946,84
ARRIVA Východní Čechy, a.s.	63 000,00	2 438,55
ZDAR, a.s.	122 500,00	4 741,63
Subtotal (additional own resources)	1 317 499,96	50 996,71
TOTAL COSTS	4 094 762,90 CZK	158 722,37 EUR

¹ The EU/CZK conversion rate varies depending on the month when the relevant expenditure was submitted to FLC verification.



Percentually, the highest shares of costs came, logically, to operators who provided most pilot connections (Trado-bus, Icom).



Interfaces and dependencies with other groups – stakeholders

Generally, among key stakeholders involved in the field of public transport belong:

- the Vysocina Region
- municipalities within the regional territory
- the state (Ministry of Transport)
- transport operators (bus operators, Czech Railways)
- infrastructure managers (the Regional Road Administration and Maintenance of Vysocina, the Directorate of Roads and Highways, the Railway Infrastructure Administration)
- passengers/general public
- other (the Regional Chamber of Commerce, the Transport Inspectorate of the Czech Police, relevant NGOs, local interest and action groups, media)

For what concerns the pilot planning and implementation themselves, the Vysocina Region addressed, in particular, municipalities and their inhabitants in vicinity of the pilot lines and public bus transport operators who provide services in these areas. The main communication activities towards these groups involved:

- April 2016 – announcement of the project support
- September 2016 – announcement of the project start, kick-off meeting
- 16 November 2016 – introductory meeting with stakeholders, presentation and discussion of the project and the pilot
- December 2016/January 2017 – negotiations with relevant transport operators, preparation of contract terms for 2017
- February/March 2017 – start of publicity campaign for potential passengers on pilot lines (website, newspaper, promotional leaflets)
- February – April 2017 – art competition for students of primary and secondary schools, to draw or paint what they feel as the most pressing problem of public transport in the city or village they live in
- December 2017 – second part of the publicity campaign (promotional leaflets distributed to households alongside the pilot lines)
- December 2017/January 2018 – negotiations with relevant transport operators, preparation of contract terms for 2018
- 22 February 2018 – organisation of visit to the pilot site for the RUMOBIL partners and



their stakeholders

- During the whole implementation period – update of information for stakeholders (website, e-mail communication, meetings if needed), regular internal meetings to organise, monitor and evaluate the pilot progress

Risks and risk mitigation

Risks when planning and implementing new public bus transport connections have been expected, in particular, in the fields of finance and attractiveness of public transport services. At the same time, it is to be noted that these risks do not concern only the pilot action as such, they can be related to the public transport in the region as a whole.

1) Financial aspects

As already explained above, the Vysocina Region has been facing, over a longer period of time, constantly *rising costs of public transport* as a whole. Rising costs are due to several reasons, such as higher mobility needs of population or increasing operation costs caused by higher prices of fuel. A decrease in revenues from fares has been observed as well, as a result of a slow, but constant decline in numbers of passengers using public transport. Another reason, that occurred during the pilot implementation and affected the whole Czech Republic, was significant increase in labour costs of bus drivers in 2017.

Cost-efficiency of public transport in Vysocina is, moreover, influenced also by dispersed settlement structure and polycentric character of territory, which lay higher demands on organisation and coordination of public transport services.

Furthermore, specifically concerning the RUMOBIL pilot, financing has been impacted by *development of CZK/EUR conversion rates*, as the pilot costs were paid in CZK, while the EU contribution is refunded in EUR. Since the project planning phase (2015/2016), the Czech currency has strongly appreciated, meaning that the available RUMOBIL allocation was, in practice, able to finance the pilot for a shorter period of time than expected before the project submission.

Despite this situation, the pilot implementation was duly ensured till June 2018, as foreseen. Since the available RUMOBIL budget for pilot had been depleted, the remaining costs were covered by the regional own resources. For the future, financial aspects of public transport in Vysocina are being tackled in the framework of the emerging thorough “reform” of the regional public transport system – “Public Transport of Vysocina”.

2) Attractiveness of public transport services

Hand in hand with present population development and unfavourable demographic prognosis for near future, the Vysocina Region has been struggling with decreasing numbers of passengers using public buses and trains, despite high financial involvement of the region, municipalities and the state. This decline has also been accompanied by an increase in using individual car transport, in particular in areas with insufficient or untimely public transport connections (such as small villages in remote areas of the regions or in the so-called inner peripheries), although the overall mobility rather grows.

Low attractivity and declining prestige of public transport are, as a general rule, attributed to its quality, which often does not meet actual demands of the travelling public (e.g. number and/or frequency of public transport connections, time successions and links between transport modes, availability of public transport in time and place, reliability and punctuality, ratio price vs. quality of service, equipment and comfort of vehicles and



stations).

In this light, the Vysocina regional government prepares a thorough “reform” of the existing concept of public transport services, with a view to optimize and improve it towards more integration and tariff unification. The future system “Public Transport of Vysocina” thus should, as a result, enhance public transport competitiveness and help attract new passengers.

In order to spread information about newly introduced connections and encourage more passengers, the RUMOBIL pilot has also been promoted by means of a publicity campaign that brought attention to the improved public transport offer in rural areas.

Achievement of pilot project objectives

The RUMOBIL pilot in the Vysocina Region aimed at improving offer of public transport connections as a key condition for development of mobility of population, in terms of linking rural areas to major settlements and, through them, to transport networks of national and EU importance. The pilot strived to test and verify demand for new public bus transport connections in the context of a territory with fragmented settlement structure and in the context of preparation of the “Public Transport of Vysocina” conception.

The pilot contributes to the project WP T2 objectives to experiment innovative approaches for public passenger transport in peripheral areas. The approach and technologies applied in the Vysocina pilot test were based on good practices identified by the transnational partnership. The proposed and tested measures combined “standard” existing solutions, designed by the current regional public transport system, with ongoing preparations to launch the future integrated system “Public Transport of Vysocina”. Developing such a system will facilitate easy and accessible mobility between rural areas and important regional nodes, where access to the national and European (TEN-T) transport network is available.

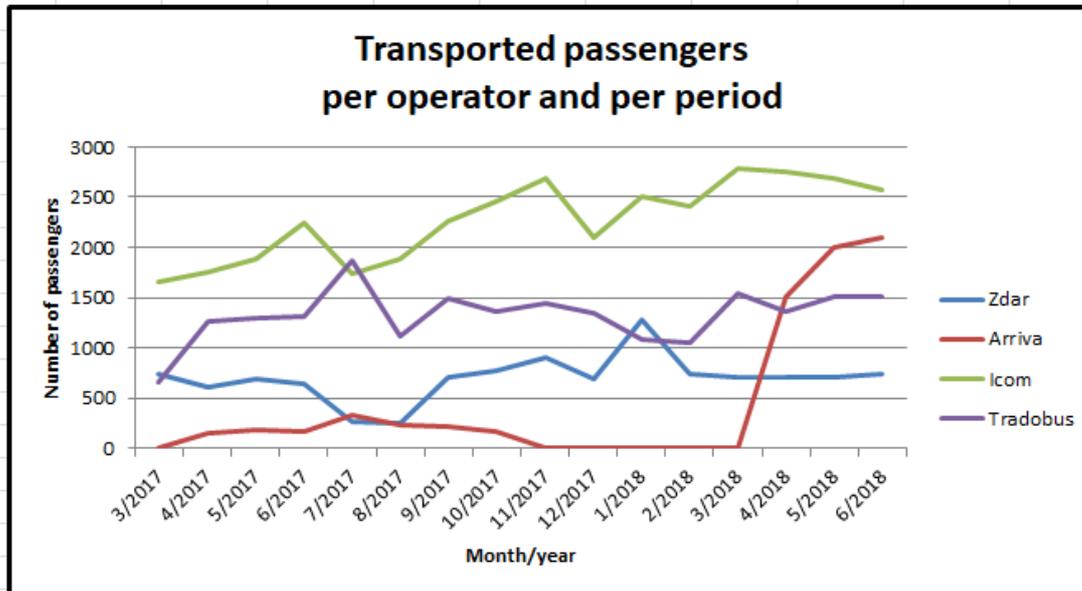
Lessons learnt and recommendations

The pilot implementation ran quite smoothly, without any major problems. All newly introduced public bus transport connections were duly operated according to their timetables and the relevant transport operators were submitting financial statements on these connections on the monthly basis.

The pilot connections contributed to improve accessibility of rural municipalities and their connection to important nodes of regional or subregional importance, that are significant centres of education, employment and various public services for the inhabitants (regional capital Jihlava, cities of Třebíč and Havlíčkův Brod, town of Velké Meziříčí). Of course, these centres also serve as traffic junctions and interchange points between transport modes. One of the pilot lines also strengthened connection to the locality of Světlá nad Sázavou and Lipnice nad Sázavou, which is an attractive tourist destination as well as an important interchange point with railway.



Development trend of passenger flows on the pilot connections throughout the pilot period (March 2017 – June 2018) is illustrated in the graph below.



It is evident that passenger flows have been relatively constant throughout the whole pilot period, with some fluctuations:

- Lower numbers of passengers on all the lines at the pilot start (March, April 2017) can be explained by the fact that the pilot connections were new and some potential passengers might not have known about them yet, which subsequently changed, besides other things due to the publicity campaign.
- Lower numbers in summer months on some lines (Icom, Zdar) can be attributed to holiday time. These lines are operated on working days (some of the Icom lines also at weekends). In the Czech Republic, in the months of July and August, there are school summer holidays, when students do not commute to schools and less employees commute to work. This “holiday effect” is not so visible in the case of the Trado-bus line, as this line is operated at weekends only.
- A smaller drop in passenger numbers can be seen in December as well and can, analogically, be related to holiday period that occur at Christmas and New Year’s Eve time.
- The flows at the Arriva line show a little different trend, as this line has a seasonal character of operation and is only running at weekends from April to October. It leads to an interesting tourist destination and is targeted not just at daily commuters to school or work, but at tourists and visitors as well, possibly also from outside the region. Although it has not gained that many passengers in 2017, the situation changed and the number of passengers has significantly grown this year. Great interest in this line so far in 2018 has, perhaps, been supported also by a beautiful and unusually warm spring.

With regard to this experience and lessons learnt, the intention of the regional government is to sustain the pilot connections beyond RUMOBIL lifetime and to include them into the emerging integrated system “Public Transport of Vysocina” conception, whose shape is being prepared and detailedly negotiated with municipalities and other relevant stakeholders. In parallel to integration and tariff unification, the region also prepares the tender documentation to select public transport operators, who will secure transport services within the new system. The current long-term contracts are valid till 1 November 2019 and it will not be possible to amend them any



more. As foreseen by the national and European legislation, the region is obliged to award new contracts, based on an open procurement procedure, till the end of 2019.

Photos



Pilot bus departing from Velké Meziříčí towards Chlumek



Tourists getting on the pilot bus in Lipnice nad Sázavou



Pilot bus arriving at the bus station in Jihlava



Kraj Vysočina prostřednictvím dotačního titulu Evropské unie Interreg Central Europe realizuje projekt RUMOBIL, který se zabývá problematikou veřejné dopravy v regionech venkovského charakteru procházejících demografickými změnami.

Jednou z aktivit Kraje Vysočina v tomto projektu je zavedení nových autobusových spojů:

Linka č. 840212 Velké Meziříčí – Chlumek	(od 5. 3. 2017)
Linka č. 790250 Třebíč – Jihlava	(od 5. 3. 2017)
Linka č. 760600 Jihlava – Havlíčkův Brod	(od 5. 3. 2017)
Linka č. 600620 Lipnice nad Sázavou – Světlá nad Sázavou	(od 1. 4. 2017)

Podrobné jízdní řady jsou k dispozici na internetu pod odkazem www.idos.cz.

Podrobné informace k této spolupráci v rámci širokého mezinárodního partnerství jsou k dispozici na webových stránkách projektu www.interreg-central.eu/rumobil nebo na oficiálních stránkách Kraje Vysočina pod odkazem <http://www.kr-vysocina.cz/rumobil-mobilita-v-evropskych-regionech-venkovskeho-charakteru-dotceny-demografickymi-zmenami/d-4076707/p1=1013>.

Links

<https://www.kr-vysocina.cz/rumobil-mobilita-v-nbsp-evropskych-regionech-venkovskeho-charakteru-dotceny-demografickymi-zmenami/d-4076707/p1=1013>