

## SMART MOVE IN THE METROPOLITAN AREA OF ALBA IULIA

### MOVING FORWARD WITH ICT IN PUBLIC TRANSPORTATION AND SHARED MOBILITY

Country: Romania

#### OVERVIEW

##### Short description of the Good Practice Case:

The project is implemented in Alba County, and includes the largest city in the county, i.e. Alba Iulia, together with 7 adjacent rural localities (communes).

The project provides integrated public transport services, operated by a single private operator, i.e. Public Transport Company of Alba Iulia, based on a public service contract with the designated local authority, i.e. Intercommunity Development Association for Public Transport Alba Iulia. The service was introduced in October 2012 and represents an integrated transport offer for the city and metropolitan area.

The project implementation resulted in (i) an increase of public transport users, (ii) reduction of CO<sub>2</sub> emissions, (iii) development of an innovative cooperation structure for providing transport services in rural area – this is one of the first times when such a model is developed and implemented in Romania.

##### Main aspect/issue addressed by the good practice

The project addresses the following aspects:

- Transport solutions for all;
- The social and economic dimension of transport;
- Regions/cities that have increased ridership thanks to good marketing campaigns, improved systems reliability, attractive fares etc.;
- Technologies that enable more efficient planning of journeys;
- Local initiatives involving the community to identify transport solutions and needs assessment campaigns.
- Financially viable systems;

The project offers a service with increased reliability, more accessible spatially and financially, better adapted and more flexible to the community's needs. Several gaps from the prior transport offer were eliminated: lack of integration of timetables for urban and rural services, limited stops in the city, lack of authority for approving or changing rural routes and for adjusting the transport fares or providing subsidies.



Figure 1. Smart Move in the Metropolitan Area of Alba Iulia project area, with tariff zones

(source: Public Transport Company of Alba Iulia - [www.stpalba.ro](http://www.stpalba.ro))

##### Main objectives of the good practice

“Smart Move in the Metropolitan Area of Alba Iulia” was implemented as a free-standing project, with the main purpose of ensuring better rural – urban connection, through a public transport service with an integrated information service, ticketing scheme and transport timetable.

The project uses a new approach for transport planning, tacking responsibilities from county authorities and delegating them to an association of local authorities. By establishing the association, each constituent local authority can adjust the transport offer to better suit the needs of their communities. Local authorities can also provide financial support, both subsidies and tariff reductions, to make transport more accessible for disadvantaged target groups.

Furthermore, the transport provider uses 2 distinct methods to assess the public's satisfaction with the service and receive the community's recommendations or objections.

## DESCRIPTION OF THE AREA

### Region

	Target area	Population	Population density
Alba County (NUTS III), part of the Central Development Region (NUTS II) of Romania.	517 [Km <sup>2</sup> ]	23,259 <sup>1</sup> inhabitants	45 [inhab. /Km <sup>2</sup> ]

<sup>1</sup> National Institute of Statistics Romania; <http://statistici.insse.ro/shop/> accessed 12.07.2018

### Other

The public transport service connects the largest city in the county, Alba Iulia, to 7 adjacent communes.

### Target user groups and needs

The service targets the population from 7 rural localities (communes), i.e. Ciugud, Sîntimbru, Ighiu, Cricău, Galda de Jos, Întregalde, Mihalţ, and the population of Alba Iulia City.

The total population of the target area was 97,833 in 2018, of which 23,259 inhabitants live in rural areas and 74,574 inhabitants live in the urban area. The total population that has access to the transport service

represents 26 % of the county's population.

The needs of the population, especially access to work and education related travel, was taken into account when establishing the routes, schedules and capacity. Furthermore, the system is characterised by increased flexibility so changes can be made based on new priorities.

## DETAILED DESCRIPTION OF THE PRACTICE

### Timeframe(s)

The public transport service for the Metropolitan Area Alba Iulia was developed as a pilot project and became operational in October 2012, with an initial contract of 6 years. Currently, the Intercommunity Development Association for Public Transport Alba Iulia, the entity responsible for the Public Service Contract assignment, is developing the tender procedure for future service provision.

### Bodies involved

**Intercommunity Development Association for Public Transport Alba Iulia (AIDA-TL)**, which has responsibilities for managing the urban and urban - rural routes, assigning the public transport service contract for the metropolitan area and evaluating the operator's activity while fulfilling this contract. AIDA-TL was one of the first associations authorised in Romania for public transport management.

**The members of AIDA-TL**, local authorities who have prerogatives for transport schedule approval, amendments and request to better suit the needs of their communities:

- Local Councils Alba Iulia;
- Local Council Ciugud;
- Local Council Sintimbru;
- Local Council Intregalde;
- Local Council Galda de Jos;
- Local Council Cricău;
- Local Council Ighiu;
- Local Council Mihalţ.

**Public Transport Company of Alba Iulia (SLT Alba Iulia)** – private transport operator responsible for providing public transport services in the Metropolitan area of Alba Iulia for the 2012-2018 period.

**Alba County council** – the authority responsible for the development of the transport program at county level. Based on requests from local authorities, the County

## DETAILED DESCRIPTION OF THE PRACTICE

Council conceded its attributions for the routes currently managed by AIDA-TL, and eliminated them from the County Transport Program.

**Ministry of Internal Affairs (MAI)** – the authority updated the public transport legislation in order to include responsibilities for public transport management for Intercommunity Development Associations.

### Mobility services provided/addressed

The project “Smart Move in The Metropolitan Area of Alba Iulia” provides integrated urban–rural local public transport services, operated by a single operator based on a public service contract with the relevant local authority. The service was introduced in October 2012 and represents one of the first integrated transport offer for a city and metropolitan area in Romania.

In order to better understand the changes brought by the project, a short description of the previous system is needed. Before the project, the transport program for routes connecting Alba Iulia with adjacent localities was established by the County Council (next level of local government), with a lower level of consultation with local authorities. The transport program was very similar to the version established around 1990, with small alterations and satisfied only work and educations travel needs. The County Council was an intermediary between local authorities and operators and petitions from localities were not always solved. This system did not provide PT rural services with public service obligation, fare reductions or extensive alternative fare options, and usually people could only purchase individual tickets for the rural-urban connection. If they needed to use urban transport, they had to purchase an additional ticket. PT services were not integrated, schedules not synchronized and/or not always predictable, service was provided with lower quality of vehicles and there were only 2 dedicated stops in the city.

The service provided in the rural areas is integrated and correlated with the service provided in Alba Iulia city and is characterised by a single information service, ticketing scheme and unique single transport time. AIDA-TL manages a total of 42 urban and urban-rural routes.

The fare structure is established based on 7 concentric tariff zones and the tickets are correspondingly valid for 60, 70, 90 or 120 minutes. These validity intervals were developed in order to ensure sufficient time to reach the city and a reserve of 30 minutes validity within Alba Iulia. The furthestmost tariff zone is situated 41 km from Alba Iulia.

The company responsible for service provision is the Public Transport Company of Alba Iulia, a private operator. The company’s fleet is composed of 90 buses<sup>1</sup>, the vast majority newer than 5 years and characterised by low carbon footprint, low floors and fitted with air conditioning and heating systems. The company has a state of the art washing facility providing public transport services with buses washed twice a day. The Alba Iulia SUMP 2017 identified that the fleet dedicated for the metropolitan service was composed of 77 buses, with 55 buses operating within the city and the rest for urban-rural routes.

### Legal Framework

The public transport service for the Metropolitan Area Alba Iulia is provided based on a contract for the delegation of public transport management, signed between AIDA-TL and the operator, SLT Alba Iulia. The initial contract, for the entire transport program, was awarded based on a public open tender in a single phase, complying with national procurement legislation and therefore competitiveness requirements. The tender was structured in order to award all the routes in one package, to a single operator and with requirement for public service obligation (PSO) in accordance with the Regulation (EC) 1370/2007.

All Local Councils approved the contract and offered AIDA-TL power of attorney to sign the contract with the winning operator. In respect to the services, the national legislation, Law no.92/2007 for local public transport services applies.

Amendments to the guidelines for this law’s implementation were made to allow an intercommunity association to delegate and manage public transport services.

1 - [www.stpalba.ro/index.php](http://www.stpalba.ro/index.php) accessed 12<sup>th</sup> July 2018

## DETAILED DESCRIPTION OF THE PRACTICE

### Cost and Financing sources

The public transport service is financed through a mix of revenues from ticket sales and subsidies from the Local Councils included in AIDA-TL.

Each local council approves the fares and compensation (subsidies) based on a technical documentation provided by the operator. The cost and revenue of each administration are taken into account while establishing compensation and ticket prices, and the latter must be the same within a tariff zone. Each administration is responsible for covering fare reductions or free complementary tickets, both the ones required by law and the local ones established for different groups (elderly, pupils, students, commuter teachers, social cases, etc.). The clearing is done based on actual travel (ticket validation). In 2013 the subsidies within AIDA-TL fluctuated between 30% and 70%, based on the locality and seasons.

The profit established for SLT Alba Iulia is 4.5%, applicable for the difference between costs and revenues. The royalties are 1% of the total revenues and are used to cover compensation owed by poorer localities, based on a decision of AIDA-TL's General Meeting of Members.

The Local Council of Alba Iulia is offering compensation for Public Service Obligation (Public Service Obligation - PSO) for the Public Transport inside the City, with an annual amount of 3.800.000 euro. The subsidies from the other partners of the Metropolitan Area: local administrations of Ciugud, Sintimbru, Intregalde, Galda de Jos, Cricau and Ighiu are totalling 150.000 euro/ year. The revenue from direct tickets sale is about 2.000.000 euro/year, including the revenue growth generated by the implementation of the project (23%)<sup>2</sup>.

The fare scheme is integrated for the whole metropolitan area, established based on 7 concentric tariff zones with different time validity for tickets based on tariffs zones. Alba Iulia city represents Zone 1 and has more options for tickets and passes. The rural – urban routes are covered by Zone 2 to Zone 7 and have several options for tickets and monthly passes:

- Individual tickets, with the price for 1 ticket fluctuating from 4.5 RON (~0.98 EUR) for Zone 2 routes to 10 RON (~2.15 EUR) for Zone 7 which represents the furthest rural routes.

- 2 weeks passes – with prices fluctuating from 48 RON (~10.32 EUR) for Zone 2 routes to 132 RON (~28.39 EUR) for Zone 7
- 3 weeks passes – with prices fluctuating from 68 RON (~14.62 EUR) for Zone 2 routes to 182 RON (~31.14 EUR) for Zone 7
- Monthly passes – with prices fluctuating from 90 RON (~19.35 EUR) for Zone 2 routes to 250 RON (~53.76 EUR) for Zone 7<sup>3</sup>

### Organizational set-up

The project is managed by the Intercommunity Development Association for Public Transport Alba Iulia (AIDA-TL). The association was one of the first of its kind in Romania and its establishment generated national legislative changes for the transport sector.

AIDA-TL is a public utility association with the purpose of developing, organizing, regulating, operating, monitoring and managing the public transport system in Alba Iulia and neighboring localities. AIDA-TL is currently composed of 8 municipalities and therefore carries out its responsibilities on the members' administrative territory.

The association's activity is managed by the General Meeting of Members (GMM), composed of mayors or their legal delegates from all member localities and a secretary. The President of AIDA-TL is the main contact person for the association and is selected through voting. The decisions taken by the GMM apply for all members. The association has a technical department composed of: technical director, secretary, accountant, legal support and technical experts responsible with monitoring the Public Service Contract. Currently, AIDA-TL has 2 employees, i.e. Department Chief and Specialist Inspector, who are directly involved in the monitoring of the transport system and checking the routes and fleet, verifying the operators accounting files, preparing the subsidy analysis and payment documents, together with other relevant statics for the transport system.

Every member locality approves by Local Council Degree the transport program, service regulation and applied tariffs, all of which are later approved by AIDA-TL GMM. The Alba County Council gives its consent for route licences issued by AIDA-TL.

<sup>2</sup> - Data provided in the May 2013 report "Smart Move in The Metropolitan Area of Alba Iulia", developed by the STP Alba Iulia

<sup>3</sup> - [www.stpalba.ro/tarife.php](http://www.stpalba.ro/tarife.php) accessed 12<sup>th</sup> July 2018

## DETAILED DESCRIPTION OF THE PRACTICE

AIDA-TL has a good cooperation with other local and county institutions and, upon request, can provide interested parties, i.e. County Council, Prefecture, Child Protective Services and others, with statistical data and documents related to the transport service.

ADA-TL is responsible for: (i) establishing the Strategy for the Development of Public Transport Services; (ii) monitoring, evaluating and improving investments for the transport infrastructure; (iii) finding new financing opportunities for infrastructure investments; (iv) delegating the public service contract to operators and monitoring the operator's activity in accordance with said contract; and (v) ensuring a balanced and accessible fare policy. AIDA-TL represents an active partner of local authorities for public transport services and carries out these responsibilities by direct mandate from all 8 members.

Therefore, the traffic charts are precisely observed and travellers wait less time at stops. The majority of the stations are equipped with real time travel information, and the buses are equipped with dynamic display systems, showing the current and following station. These facilities are complemented by the audio announcements on lines and at stations.

The company has a well established website ([www.stpalba.ro/index.php](http://www.stpalba.ro/index.php)) with ample facilities for users:

- provides 3 alternative methods for route planning and an on-line guide for using them, together with easy access to a national platform (Transport Urban - [www.stpalba.ro/index2.php](http://www.stpalba.ro/index2.php));
- has a clear on-line presentation of the fare structure and ticketing options;
- includes information about the transport program, with precise times for each station;



### Supporting technologies

STP Alba Iulia uses urban mobility cards for all travelers and a modern electronic ticketing system. The company was the only one in Romania (in 2013) which used validation systems based on the GPS position of the customer in the relation with the tariff zones, therefore being able to introduce a fare-zone and time-based system. Also, the company introduced the possibility to pay the ride via SMS, currently available only in Zone 1. All buses are equipped with GPS, allowing the use of a fleet management and dispatching system. STP Alba Iulia owns an integrated traffic monitoring system on all the vehicles and on all routes, which can thus be localised in real time on a digitalised map of the entire park.

- Includes an on-line survey for users' satisfaction;

Furthermore, the company established a free telephone line for petitions and suggestions. If the petitioner provides identification data, (s)he is later informed about the solution developed by the operator.

Also, the company introduced free wifi in buses starting since 1 December 2013.

## INNOVATION ASPECTS

### ORGANISATIONAL RESPONSIBILITIES AND PARTNERSHIP WORKING ARRANGEMENTS

The “Smart Move in The Metropolitan Area of Alba Iulia” project was a big challenge for the operator and local administrations because it was one of the first times in Romania when a PT operator and the local administration introduced the Metropolitan transport.

The greatest achievement was the creation of the Intercommunity Development Association for Public Transport Alba Iulia. The cooperation between local administrations through AIDA-TL is an innovative issue at national level, being one of the first associations in Romania organised in this mode with responsibilities for managing public transport for rural areas.

### LEVEL OF PUBLIC SECTOR FINANCIAL SUPPORT

The project created an improved framework in which the communes were able to have a larger involvement and methods for managing local transport and tailoring it to the community’s needs. Through AIDA-TL each members can financially support the local transport as a social service, adjusting ticket prices based on the compensation they are able to provide the operator.

Before the project, urban-rural services did not receive financial support to offer fare reductions or free complementary tickets. Also, the local administrations can support one another, as they are currently using royalties to cover compensation owed by poorer localities.

### INTERCONNECTIONS BETWEEN SHARED AND PUBLIC TRANSPORT SERVICES

Partnerships between regular PT services and ReziPouce are organised at several places to improve PT performance (ex. Macs in “*les Landes*”)

### ICT CONNECTIONS AND IMPACTS OF THE TECHNOLOGICAL SOLUTIONS IMPLEMENTED

The operator was the first one in Romania to use validation system based on the GPS position of the user making it possible to introduce the fare system.

Implementing a mix of ITC solutions makes it possible to provide a high quality service, tailored to the communities’ needs and increase public transport attractiveness

### OTHER (E.G. SOCIAL INNOVATION, ETC.)

Social innovation is connected with financial support, as public transport is more accessible for rural residents. Furthermore, the services have a better coverage of the AIDA-TL area as a result of adjusting transport routes improving citizens’ accessibility.

STP Alba Iulia has been collaborating (since September 2011) with a local inventor who developed special air filters that reduce fuel consumption and increase engine power. Some buses were fitted with these filters and registered 8-11% fuel usage reduction without any side effects. The experiment was extended to other buses in the fleet

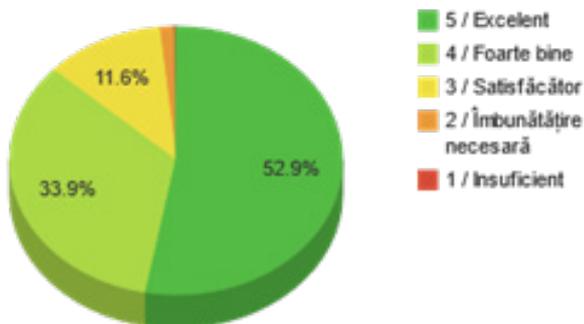
## ASSESSMENT

### Ridership and other key metrics/results (through key-indicators, where applicable)

According to the STP Alba Iulia Report from May 2013, the system is “perfectly functional and it is the first one ever implemented in Romania”.

The system offers great flexibility for adjusting it to the community’s needs, as routes and tariffs can be adapted by each local administration. Furthermore, the capacity per route can be tailored based on ticketing validation information about the number of users. As a result, current routes cover all points of interest in the city, the travel times have been reduced, transfer conditions have been improved and the service is provided with urban buses, compared to previous lower capacity and quality vehicles (minibuses/ maxi-taxis).

#### Overall customer satisfaction



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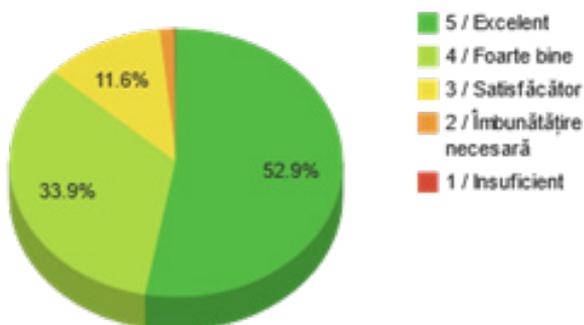


Figure 2. Public perception on services provided by the operator;  
Source: ENERQI project

Since October 2012, after the implementation of the existing local public transport system in Alba Iulia (maintaining the same standards of quality for the city and metropolitan area), the number of journeys made

by public transport between Alba Iulia and villages in the metropolitan areas (tariff zones 2-7) increased by 43%.

In absolute figures, the number of additional trips per month was 27,300. Assessing values per working-day, at least 1,050 additional trips per day were made, which translates into 525 individual visitors per day travelling to Alba Iulia with public transport instead of cars. The result is a reduction of at least 210 cars per day from city traffic during the peak hours (7:30 to 8:15), estimated with an average occupancy of 2.5 persons / vehicle.<sup>1</sup>

Between 2010 and 2013, Alba Iulia was involved in the ENERQI project which aims to improve public transport by using observations of customers regarding quality. For the project, STP Alba Iulia recruited 557 observers (275 were planned at the beginning), most of them were recruited directly in the bus by STP operators. The observers, as defined by the project, would provide recurrent observations and insights about the public transport quality. The public’s perception on services provided by the operator is presented in Figure 2.

The study “local community Barometer: Alba Iulia 2014”, released by the University of Alba Iulia, placed urban public transport on first place in the city’s inhabitants’ assessments between public services managed by the Municipality. Over 82% of respondents felt that public transport in the city deserves the qualification “very good” (45.3%) and “good” (36.8). Only 2.7% of respondents considered the service “unsatisfactory”, while 8.4% considered it “satisfactory”.

### Good Governance

This was one of the first pilot projects in Romania designed to provide integrated public transport services in a metropolitan area. It proved a success and resulted in a significant increase in passengers, due to the integrated fare system, correlated transport program, flexibility in adjusting the program based on users’ needs, high level of predictability and information for passengers. It resulted in a 43% increase in users.

Users’ engagement and interest in the service is supported by STP Alba Iulia through online surveys and a dedicated telephone line for petitions and proposals.

1 - [www.eltis.org/sites/default/files/16-06-2015\\_a\\_nicola-perspectives\\_on\\_mobility\\_poverty\\_alba\\_iulia\\_region.pdf](http://www.eltis.org/sites/default/files/16-06-2015_a_nicola-perspectives_on_mobility_poverty_alba_iulia_region.pdf) accessed 12.07.2018.



## FEATURES THAT ARE CONSIDERED TO BE GOOD PRACTICE (LESSON(S) LEARNT)

“Smart Move in the Metropolitan Area of Alba Iulia” is one of the first projects that provided integrated transport services for a metropolitan area in Romania, while using extensive ITS elements. The project was developed and implemented as a result of local interest, before the development of wide spread Sustainable Urban Mobility Plans (SUMP) in the country. The project is considered a success at national level due to the novelty it possess, in terms of integration and management, compared to other practices in the country and almost 6 years of efficient service provision.

The introduction of a managing authority (AIDA-TL) implied a large level of cooperation between local actors and taking ownership of county routes implied the need for cooperation and negotiation with the County Council. Furthermore, delegating urban and county routes to a single operator came with certain changes from a business perspective at county level, as some operators were disadvantaged by losing public transport routes. This was also challenging for smaller localities because taking ownership of public transport routes and providing a high quality service implied larger costs. AIDA-TL developed tailored solutions to tackle this challenges.

While the evaluation procedure undertaken so far is not comprehensive, AIDA-TL collects and evaluates relevant parameters that take into account both the technical and economic viability of the system and also the citizens’ needs and opinions. The assessment is facilitated by the efficient and integrated use of a mix of ITS solutions, including the fare integration system, an advance practice for Romania.

The project was promoted in Romania, both by the operator and local administration, as a good practice example for other authorities interested in extending their urban transport systems, as part of the development process for SUMP.

## REFERENCES FOR FURTHER DETAILS

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### *Contact of the operator and of relevant stakeholders*

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### Key references

- Smart Move in the Metropolitan Area of Alba Iulia Report, 2013: [www.busandcoach.travel/download/awards/2013/stp-alba-iulia-romania.pdf](http://www.busandcoach.travel/download/awards/2013/stp-alba-iulia-romania.pdf)
- Perspective on mobility poverty and responses in the Alba Iulia Region: [www.eltis.org/sites/default/files/16-06-2015\\_a\\_nicola-perspectives\\_on\\_mobility\\_poverty\\_alba\\_iulia\\_region.pdf](http://www.eltis.org/sites/default/files/16-06-2015_a_nicola-perspectives_on_mobility_poverty_alba_iulia_region.pdf)

### Websites

- Public Transport Company of Alba Iulia: [www.stpalba.ro/transport\\_metropolitan.php](http://www.stpalba.ro/transport_metropolitan.php)