

## ELLI – a ride sharing service as a complement to public transport

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ELLI is a research project within the competence hub for rural mobility (Kompetenzzentrum Ländliche Mobilität, KOMOB) in Wismar. KOMOB is registered as a regular company, but with limited profit-making ambition. The main objective of ELLI is to contribute to stronger (and more attractive) rural regions.

### Preconditions, inspiration, nurture

ELLI started in 2015 as a project implemented in several villages in the federal state of Mecklenburg-Vorpommern (MV) in north-eastern Germany. In addition to the existing public transport system, operated by the Mecklenburg-Vorpommersche Verkehrsgesellschaft (MVVG; public transport provider in MV), ELLI provides a ride-sharing service self-organized by the inhabitants of the area. Voluntary drivers offer rides with cars provided by ELLI in order to complement the public transport network in areas which would otherwise be hard or impossible to reach. Rides can be booked via phone call. The financing of ELLI comes from different sources, mainly from public funding for research projects, in which ELLI is involved as a pilot project. ELLI aims at solving the problems of hard accessibility and declining social interaction in the region.

**The main problem** in the region is the fast-growing area with no coverage by public transport services of the MVVG, leaving villages and entire areas without any public transport connection besides school buses. Mobility in these rural areas is especially important for elderly people, who do not own a car, but have to buy groceries or need to see their general practitioner. Furthermore, the area should also be made interesting for young families with children. Since an expansion of the existing bus infrastructure is not economically profitable, a new solution to improve rural mobility was needed. At the beginning of the project, it turned out that a “citizen bus”-line operated by volunteers which makes use of the existing bus stop infrastructure was not a suitable solution for everybody, because some citizens live in a walking distance of eight kilometres to the next bus stop. Due to that fact, the idea behind ELLI was to offer rural communities shared cars which can be operated by voluntary and pre-registered drivers. The car rides should not have fixed routes and the schedule should be developed by a bottom-up working group consisting of villagers from the near surroundings. In that way the project could be adjusted to the needs in the villages. It is due to this specific tailoring of the project according to the population’s needs that routes sometimes lead to other villages in the area or sometimes connect remote areas with regular stops of the public transport system operated by the MVVG.

The workgroup of ELLI together with the mayors in the area developed a theoretical and organizational framework that enabled consistent implementation during the first two years of the project. After the framework was set up, the mayors communicated the idea to the population and established voluntary village working groups.

Thanks to these groups, the project could be developed in constant exchange with the population of the different rural communities. After the theoretical build-up of the project idea and the clarification of regulatory necessities the practical starting phase began with one vehicle to establish a learning by doing process.

Security issues were only a minor concern, since people know each other in the small rural communities and drivers are met with the general trust of their fellow citizens.

**The following target groups** were identified initially and seem to remain over time:

- Kids and teenagers without drivers-licenses/cars
- Elderly people without the ability to drive (doctor, groceries)
- Villagers with hobbies that require a ride (soccer, music lessons, etc.)
- Retirees with time and desire to help/drive others and meet people in their cars
- Villagers longing for more socializing and meeting places – in cars and elsewhere

## Implementation

### Resources:

As mentioned above, the financial resources for ELLI come from public funds dedicated to research projects that test innovative mobility solutions in rural areas. Since the public transport agency MVVG is reducing the network frequency in less populated areas in MV due to budgetary constraints and the also limited municipality budget, this was the best solution to finance the project. Currently, ELLI is participating in four public research projects mainly financed by different Federal ministries and gets, furthermore, a funding of EUR 50,000.00 by the county administration.

Drivers get a compensation for volunteer work on a yearly basis amounting to about EUR 700.00. Udo Onnen-Weber stated that a later expansion of the project will strongly depend on a higher compensation for drivers. The low compensation for volunteer work is only planned to be paid to drivers in the starting phase of the project. After that, a higher compensation needs to be offered, if more drivers shall be attracted to register for ELLI. In order to finance this increase, an agreement has already been established with the county administration and the MVVG. The money saved by the MVVG, due to ELLI offering mobility services in areas the MVVG would otherwise have had to cover, will, in part, be used to pay the drivers a higher reward.

Currently, one ride with ELLI costs EUR 0.50.

Given its complementary implementation into the MVVG network the service is no competition for already established transport infrastructure. It is rather a necessary connection to the rest of the public transport system for the people living in the area, meaning even more customers for the MVVG. Furthermore, it is no competition for taxis, as it is not profitable for taxi providers to operate in the long stretched rural areas for only a few rides requested daily. Udo Onnen-Weber stated that the only taxi provider in the area is primarily a patient transport provider who had no objections to the establishment of ELLI.

### **Enablers and Barriers/ Bottlenecks:**

The key to the successful implementation of the project was the bottom up approach with a strong involvement of the local population. The small budget, especially for material costs, requested a strong pro-bono support by the villagers, which, in turn, led to a strong commitment by the local community to ELLI. Furthermore, this commitment facilitated a constant feedback concerning the needs and wishes of the service users, making it easier to adjust the solution adequately.

Main barriers can be seen in the poor functioning of mobile phone and internet services in the region. The network coverage offered by the providers is not meeting the same standards as in urban areas in Germany. Depending on the exact position, even phone calls are sometimes not possible. But at the moment, rides have to be booked via phone calls, which generates major problems for users in isolated spots and is hence not a long-term solution for the service. Therefore, a precondition for the successful expansion of the service, would be a strong progress in the digitalisation of the area. Since a smartphone application combining the public transport system and ELLI in one single platform is already planned, the further development of mobile internet in the region is absolutely crucial for the next stages of the project.

Furthermore, the strict passenger transportation law in Germany is a main problem for ELLI. Since the budget is low and expanding the service requests for a higher payment of drivers, at some point a passenger transportation permit for commercial transports will be necessary. This permit can under current circumstances not be issued, without an exemption from the applying regulations or a general reform of passenger transportation law on a national level.

### **Legal Issues:**

Given its current status as a pro-bono service, legal issues were not perceived as a major obstacle for ELLI's first implementation. After two years of up-front planning the implementation followed a non-profit approach relying on volunteer work and cheap fares. But in the long-term planning, legal issues are perceived as the main barrier for the expansion of ELLI. A higher compensation for the drivers would not be possible, since the German transport law is forbidding any commercial activity in the transport sector, without complying to strict regulations about licenses for drivers and the company implementing the service. Therefore, parts of the received research funds are going into the examination of the legal status quo in German mobility law. A research paper was drafted, that gives legal recommendations for future development of mobility regulations. In the meanwhile, the developers of ELLI avoided having to apply for a permit, thanks to the service having only limited profit-making ambitions. According to Udo Onnen-Weber, a change in the regulatory framework for private and public transport providers is thus necessary to cope with the mobility challenges in rural areas.

While currently there is no special insurance needed to provide the cars to the municipalities and no special licenses for the drivers, this might also change at a later stage of the project. Therefore, reviewing the legal framework for innovative mobility solutions is a major research field of KOMOB.

## The outcomes, effects and further development

ELLI as a mobility solution generates the following direct and indirect advantages for the villagers:

- Increased accessibility to important infrastructure in the core villages in the rural areas.
- Fostering the community approach in rural areas through social exchange and getting to know the people in the region.
- Incorporation of specific needs in different villages through direct involvement of the population in the project development.
- Economic advantages for driver and passenger by establishing cheap fares and a yearly compensation for volunteer drivers.
- Mobilization and socialization of elderly people.

**The next step** in the project development is, first of all, to buy more cars for ELLI. Udo Onnen-Weber referred to four phases for an expansion of the mobility service. In the first phase, the current status, the most important features of the service are to be tested in practice. After autumn 2018, a special permit should be issued to allow ELLI a higher pricing of the service in line with passenger transport regulations. This should generate economic autarky for the project and allow the move to the next phase. On the third stage, ELLI will turn into a “mobility-as-a-service” solution incorporating the project, public transport offers and other services like elderly care into one single transportation platform. The future goal is to include autonomous driving in rural areas into the service.

## References

Prof. Onnen-Weber, Udo, project coordinator. Interview on 15-03-2018.