

From ART-Forum to Columbuss



ART Forum gave us the opportunity to develop autonomous transport in two ways: in policy documents and in the technical aspects. Due to the meetings, events and projects of the other members we increased our insides and information as to which aspects autonomous road transport can be useful within our total mobility policy. We used this on a regional and national level.

On the technical side we started with a shuttle project and during the ART-Forum project we developed our own universal technique with our partners like RobotTuner. First we tested this technique in a Renault Twizy on low speed and with different sensors and traffic situations. After that we also tested on high speed and with better sensors.

What are the key outcomes?

Now that ART-Forum has reached the end we can say that we achieved a number of interesting results. There is a national roadmap now and our regional policy documents contains a full paragraph on autonomous transport. For us the bigger policy goals where ART can contribute to are:

- 1.** Relationship between city and rural area:
 - a) Less space in the city (infra and parking) and less people in the rural areas (attainability issues);
 - b) Liveability of cities (traffic and parking) and rural areas (services)
- 2.** Operational costs of public transport (and also logistics):
 - a) More and extra buses in cities;
 - b) flexible and on demand services in rural areas and also driving back to the depot.
- 3.** Aging and a lack of enough drivers:
 - a) public transport; b) shipping and c) logistics.
- 4.** Sustainability goals: a) zero emission; b) saving fuel/life cycle costs.

The other part which is unique is that we started testing with a shuttle, in order to develop a digital driver license for autonomous vehicles. Due to several reasons including Corona and also the (lack of) speed of the technological developments we saw that it became more interesting to develop a universal technique ourselves together with RobotTuner and other partners. From testing with a small vehicle, a Renault Twizy, we now have reached the phase of scale up to the first 18 meter bus. This will be done in a new project that can be seen as a sequel of ART-Forum and the first goal is the make a bus depot in Groningen fully autonomous.



In order to implement autonomous transport within our mobility systems it is crucial to make sure that you know to which bigger policy goals it can contribute. These two must be in line, otherwise you will not overcome the failures during the development process of autonomous transport on the way to a mature system that can function well within for instance public transport concessions. ART-Forum helped us to do so.

What are the next steps?

When it comes to the policy documents, the next steps will be to make an agenda for development on a national level together with the Ministry, other regions and private parties with clear steps for the next couple of years in order to reach the goals in the roadmap for 2030 and 2040. We already started this process.

For our regional policy document, we already went through this process and now we like to start implementing it after the board of the Province of Groningen have agreed to it end of this year. We believe the way we wrote down and implemented autonomous transport within our total mobility policy can be an example for other governments to really make it a part of the daily mobility system

Now ART-Forum has come to an end, we feel like it is not the end for autonomous road transport. It is time for the sequel of ART-Forum and we believe this can be done within a new project called Columbuss.



We believe the way we wrote down and implemented autonomous transport within our total mobility policy can be an example for other governments to really make it a part of the daily mobility system.

The Columbuss project is the first significant example of an autonomous transport project with clear underlying policy goals and ART-Forum was a great prequel for it!

Contact

To get in touch with ART-Forum, please visit our website

www.art-forum.eu



Interreg
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Project partner

Province of Groningen

Public Transport and

Smart Mobility

Daniël Koelikamp

d.koelikamp@provinciegroningen.nl



**provincie
groningen**

Partners



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