

Letter of Intent Autonomous Transportation Systems

Attainable and liveable North of The Netherlands



Foto: NASA



Common goal

Autonomous transportation systems (autonomous vehicles, platooning, etc.) will play a more and more important role in the coming years in several policy fields. The three provinces in the North of The Netherlands and the municipality of Ooststellingwerf share a common goal when it comes to autonomous transportation systems: **we want to explore the possibilities to use public autonomous transportation systems as a way to maintain and improve the attainability and liveability of our rural areas and areas with a large decrease of population.** The municipality of Ooststellingwerf wants to contribute to this goal by giving the provinces possibilities to gain knowledge and experience during the pilot in Appelscha.

Especially in these rural areas we see chances for autonomous transportation systems. Herein our approach is unique compared to other pilots so far in Europe. We consider the pilot in Appelscha as a first step to a sustainable integration of autonomous transportation systems within our public transportation system as a whole.

In our view the North of The Netherlands has all the characteristics for autonomous transportation systems to become a sustainable part of the total range of modalities in the long term. Especially in public transportation there are several opportunities. Being able to get transportation in every place for everyone creates chances for a vital and connected rural area. Hereby attainability and liveability come first. To realise this in the coming years it is necessary to do several pilots on multiple tracks. Autonomous transportation systems can be used as a:

- **'missing link' on top of the existing main public transportation system, from villages and rural areas to public transportation hubs for buses or trains;**
- **transportation system from and to leisure and tourist attractions and during events;**
- **transportation system from and to healthcare (strengthening and possibly partly replacing transportation for certain groups and so called 'wmo' transportation);**
- **way to improve the mobility of elderly, visually impaired and disabled people.**

Reasons for the letter of intent

The three provinces in the North of The Netherlands and the municipality of Ooststellingwerf are signing this letter of intent because we:

- **want to put the North of The Netherlands on the map as the pilot area for autonomous transportation systems with an optimally attainable and liveable rural area as a core;**
- **want to do long term and large scaled tests of autonomous transportation systems in the coming years on several tracks and with different approaches;**
- **want to look for European and national funding (for instance Horizon 2020 and Interreg A) together as a region;**
- **want to keep cooperating with the national government as a region together in order to see the North of The Netherlands as a total pilot area for autonomous transportation systems including concertation about the necessary legal framework for this;**
- **want to cooperate closely on a European and regional level and share knowledge with other European regions.**

In order to put the North of The Netherlands on the map as the pilot area for autonomous transportation systems cooperation is necessary. To apply once or more times for European funding (for instance Horizon 2020), to learn from each other's experience, to share knowledge and more common because transportation simply is not bound to administrative borders. This cooperation leads to a permanent knowledge network for autonomous transportation systems in the North of The Netherlands.

With this cooperation we want to create short links with other pilots, governments (in The Netherlands and in Europe), universities and private parties, so that we can learn from the developments of autonomous transportation systems in other regions and they can learn

from us as well. With the national government for instance we would like to develop standard legislation, which makes it easier to give autonomous driving vehicles the permission to go on the road. In short, by drawing on collective strength we can create a better attainable and liveable North of The Netherlands.

Priorities North of The Netherlands

In order to maintain and where possible improve the attainability and liveability of the rural areas, as a region we want to gain knowledge and experience in practise together and become the pilot area for autonomous transportation systems in The Netherlands. Within this cooperation and the earlier mentioned main goal there are several priorities, that stand out already and through which the North of The Netherlands wants to put itself on the map. These priorities are mentioned below:

- *Transportation during events (CH18)*
Leeuwarden is a European capital city of culture in 2018 (CH18). During this event (and other events and festivals) we want visitors to gain experience with autonomous transportation systems. Hereby knowledge is gained on the use of autonomous transportation systems during events. Afterwards this knowledge and experience can be used during other events and festivals;
- *Smart and green transportation*
Smart and green transportation is an important priority in our region the coming years. Pilots with autonomous transportation systems fit perfectly within this priority, because these 'smart' vehicles are fully electric. Within the pilots there are also combinations possible with hydrogen and solar energy. Hereby our knowledge on sustainable energy comes in handy. Combinations with for example the pilot with 5G fast internet technology, which will take place in Groningen the coming years, are also an option.
- *Sensor City*
Sensors are the senses of autonomous driving vehicles. The network of measurement Sensor City - which will soon be extended towards the TT-Circuit in Assen - offers the North of The Netherlands an opportunity to test and validate sensor technology.
- *Knowledge*
Development of an independent and 'open source' transfer point of knowledge of the attainability of the rural areas. Goal is to liaise with superregional networks and parties to make large scaled testing in the North of The Netherlands possible. We are doing this by maintaining and extending a close network and by acting fast;
- *Leisure and tourism*
Realising innovative solutions for leisure and tourism in our nature. For instance using the autonomous driving vehicles as shuttle between MTB-tracks or attractions, within natural areas, as a safari vehicle through the nature, experiencing historical tracks, from and to the fortress of Bourtange, etc.
- *Healthcare*
Autonomous transportation systems can play an important part in so called WMO transportation and the transportation of certain groups in our rural areas from and to healthcare centres and hospitals (like the new OZG hospital in Scheemda) or from small villages to public transport hubs with connections to these healthcare centres. Hereby upholding the quality and affordability of this kind of transportation also plays an important part.



Goal of the three provinces and the municipality of Ooststellingwerf is certainly not to realize these priorities alone. With our cooperation we are aiming on working together with as much interested parties as possible. Appendix 1 contains a non-exhaustive list of (potential) stakeholders and parties with which we are already cooperating, The national government has for example already stated that the process of developing autonomous transportation systems fits within the national ambitions, which is why they warmly support this also in the North of The Netherlands.

Thus drawn up in quadruplicate and signed, Appelscha, 13 September 2016

Municipality of Ooststellingwerf

Province of Groningen

.....
J.M. Welle

.....
F.Q. Gräper - Van Koolwijk

Province of Fryslân

Province of Drenthe

.....
J. G. Kramer

.....
H. Brink

Appendix 1: (Potential) Stakeholders

Some parties are already involved in different ways. The parties below are familiar with, co-operating or are even a partner/financer in the pilot which will take place in Appelscha the coming months:

- The National Government (i.c. Ministry of Infrastructure and Environment);
- Polis;
- CityMobil;
- RDW;
- CROW;
- OV-bureau Groningen Drenthe;
- Taxi company Kort;
- Easymile.

Furthermore we see possibilities and/or would like to cooperate with (amongst others) the follow parties:

- Public transport companies;
- Taxi companies;
- Navya, Google, IBM and other parties who are developing autonomous driving vehicles;
- Festival organisers;
- Healthcare companies and hospitals;
- Middle class;
- Owners of natural areas;
- Governments (municipalities, provinces, city regions and the national government);
- Universities and Highschools (RuG, Hanzehogeschool, NHL, etc.);
- Other regions in Europe;
- P10;
- Automotive Campus Helmond

The parties mentioned above are an indication of possible partners in the coming years, it is not a limited list. The three northern provinces and the municipality of Ooststellingwerf are open to all private and public parties that want to contribute to the idea of developing the North of The Netherlands as the area for autonomous transportation systems or those who are simply interested in sharing information on the matter.