

EINDHOVEN, Netherlands

BACKGROUND INFORMATION	
PROJECT TITLE	Automotive House (part of the High Tech Automotive Campus) Case study title: Innovation on the open road
Beneficiary	Gemeente Helmond Projectbureau
Duration of project	09/2008 – 08/2011: 35 months
Member State	Netherlands Zuid Nederland – Eindhoven Region
Geographic size	Cooperation Region Eindhoven (comprising 21 municipalities): 728 133 inhabitants – 1 440 km ² Eindhoven agglomeration 440 000 inhabitants – 540 km ² Municipality of Helmond 90 000 inhabitants – 56 km ²
Funding	Total budget: €2 270 000 ERDF contribution: €908 000 (40%) Public co-financing: €1 362 000 State (Ministry of Economic Affairs): €454 000 (20%) Province of North Brabant: €227 000 (10%) Municipality of Helmond: €681 000 (30%)
Operational Programme	Operational Programme 'South Netherlands' CCI no: 2007NL 162PO003 Priority 1: Knowledge economy, entrepreneurship and innovation
Managing Authority	Provincie Noord Brabant (Province of North Brabant) Postbus 90151 NL-5200 MC 's-Hertogenbosch Tel.: +31 73 681 2812 Fax: +31 73 614 1115 E-mail: info@brabant.nl Web: Province of North Brabant http://www.brabant.nl/subsites/english.aspx Web: OP-Zuid http://www.op-zuid.nl/
Cohesion Policy Obj.	Competitiveness
Main reason for Highlighting this case	The Automotive House is the centrepiece of a venture to establish a High Tech Automotive Campus (HTAC) in Helmond, which in turn is one of the key components of the Eindhoven region 'Brainport' strategy. With the goal of developing a cutting-edge automotive hotspot to strengthen the Dutch automotive industry (building on the South East Netherlands' respected high-tech and automotive tradition) the project as a triple-helix initiative is in itself interesting. The Automotive House functions as the trigger for the full development of the HTA Campus, operating as a centre for its activities (housing its management structure). This automotive cluster is also an important feature within the wider 'Brainport' strategy framework designed to create a platform for innovative growth in and around the city of Eindhoven. As such it complements other localised open innovation initiatives (the High Tech Campus linked to Philips in Eindhoven, for example) and contributes to the realisation of the programmed high-tech region. The multi-faceted, high-tech growth strategy encapsulated in the 'Brainport' concept is intended to impact on local, regional and national economic performance. Establishment of the Automotive House and Campus development is in itself expected to generate 175 new full-time jobs. The strategy of strengthening the economy of the South Netherlands by encouraging open innovation is consistent with the high-tech experience and presence in and around Eindhoven. For instance the HTA Campus project is included in the

	‘Investing Together in Brabant (Cities)’ (<i>Samen Investeren in BrabantStad</i>) programme, which for the Municipality of Helmond alone means investment of €250 million (€100 million from Helmond, €67.5 million from the province) intended as a major stimulus for the labour market – in which open innovation and campus-type initiatives are seen as drivers for job retention and creation in the city region.
Key Contact person	Daniel de Klein, Projectmanager Investeringsbevordering / Automotive Clusterontwikkeling (Investment promotion / Development automotive cluster): D.de.Klein@helmond.nl
Keywords/Tags	Triple Helix, Innovation awareness-raising, education and training, Clusters and business networks

1. PROJECT DESCRIPTION	
Overall objective / goals	<p>The primary objective of the Automotive House is to operate as a centre for the promotion and development of the Dutch automotive industry. Its position as an impulse for, and ultimately at the heart of, the High Tech Automotive Campus was planned to stimulate a market-oriented cooperation between the public authority, the business community and research bodies in this sector. The establishment of a High Tech Automotive Campus corresponds closely to the goals of the 2007-2013 Operational Programme for the South Netherlands (OP-Zuid) to develop a dynamic knowledge based economic future, targeting the growth of favourable clusters and key sectors identified at national level. One of these sectors is ‘High tech systems and materials’ where the automotive industry has an important contribution to make. The project falls under Priority 1 of the OP – Knowledge economy, entrepreneurship and innovation – aiming to confirm the South Netherlands as a top technological region by addressing the following objectives:</p> <ul style="list-style-type: none"> • Increasing economic return from the knowledge economy • Encouraging growth in the number of companies engaged in innovation, and particularly SMEs • Expanding entrepreneurship and supporting starters, spin-offs and growth potential • Creating prime conditions for enterprise and research in and around cities • Improving employment opportunities especially for urban populations <p>The role of the Automotive House is consistent with these aims, and the central goal of the project is to create the first building block and drive the establishment of the HTA Campus. The Automotive House is therefore conceived, with ERDF funding, to operate as the integral centre of activity for the campus but also for the wider promotion of the Dutch automotive industry. It could be described as a one-stop shop or the ‘clubhouse’ for the sector based on objectives to:</p> <ul style="list-style-type: none"> • Bundle activities and bring together organisations directed at strengthening and promoting the automotive industry • Act as a frontrunner and catalyst for the full development of the HTA Campus (to generate a ‘flying start’) • Create an optimal climate for open innovation and knowledge development by providing a tailored supply of facilities, programmes and activities to support automotive businesses, vocational training institutes and research and knowledge institutions <p>The Automotive House is a departure from past or standard practice in that it is not simply a support to the automotive industry as it has traditionally operated in the area, with a strong emphasis on production – by DAF (NedCar), Volvo, Mitsubishi, DAF Trucks, VDL Bus and Coach. The glory days of vehicle production in the area will probably never return, so the focus is firmly on reinforcing existing activities (even production i.e. DAF trucks, VDL Bus and Coach, niche vehicles) but promoting the lower-profile but high-potential service</p>

	<p>suppliers which are still strong and establishing themselves in the area as a result of the high-tech climate. Open innovation is seen as a crucial element in developing top-technological solutions for the existing market but also to proactively respond to supply new automotive initiatives (alternative low-carbon vehicle technologies for instance) and to create new developments in the industry.</p>
<p>Description of activities</p>	<p>The ERDF-funded project was designed to ensure:</p> <ul style="list-style-type: none"> • The physical establishment of the Automotive House, the renovation, layout and organisation of the site (exterior and interior, as well as measures to improve public access to the building) • Support for the start-up and running-in phase of the Automotive House (to cover initial start-up deficits, rent of work space etc.) • Initiation and organisation structure of the HTA Campus project office, installation of the 10-person management team to run and coordinate the campus on a day-to-day basis (including promotion and acquisition, set-up and offer of facilities and support services to campus occupants) <p>The physical entity functions as the central meeting place for stakeholders in the Dutch automotive industry (like TÜV Rheinland TNO – EU centre of excellence for vehicle safety; Benteler, VIRO and Brace engineering companies; ROC Ter AA – progressive regional training centre for vocational and adult education, TomTom global positioning systems). It provides accommodation and/or facilities for diverse organisations such as the Automotive Technology Centre, the European Centre for Mobility Documentation (ECMD), the project office for the HTA Campus, FIER Automotive, a branch office of Holland Automotive and Educational Institutions (Technical colleges – Fontys; ROC Ter AA; Technical University Eindhoven TU/e).</p> <p>Within this construction the Automotive Technology Centre knowledge and innovation network organises workshops, courses and seminars with business visits and guided introductions to the campus. The ECMD provides a state of the art documentation and information service for the automotive business community, which includes the updating of the ‘automotive atlas’ (a database listing companies), test facilities, training opportunities, publications and news bulletins. All activities are developed as a function of the 5 key components which define the working of the Automotive House:</p> <ul style="list-style-type: none"> • Meeting place – with an activity programme geared to the needs of occupants, partners (i.e. Automotive Technology Centre workshops, High Tech Automotive Systems workshops, FIER Automotive trade delegations and missions, promotional events, conference and meeting spaces) • Information centre – presentation of Holland Automotive, library and digital database facilities, exhibition space • Education and training establishment – workspace for local technical colleges, automotive master classes, training sessions • Workspace – office space for automotive organisations, businesses and students • Facility sharing resource
<p>Recipients</p>	<p>As a focus for open innovation the recipients of the project are basically all stakeholders involved in some way with the automotive industry in the Netherlands, but the offer is also available to potential partners across the border in Belgium or Germany. The underlying principle is the fostering of triple-helix interaction between businesses in the sector (constructors, designers, engineers, suppliers); research bodies and vocational (technical) training colleges (Technical University Eindhoven for example) and public authorities at all levels with responsibility for economic growth, employment and innovation.</p> <p>At a secondary level the cluster forming generated by the installation of the campus and its activities benefits the local economy and employment directly (and indirectly – hotels and restaurants for instance). VIRO engineering alone for example employs 450 people locally, skilled workers from the historically located</p>

	<p>production plants and young technicians, products of the technical education facilities feeding the high-tech sector. Another example is that within the building occupied by the campus a printing firm has set up. This was not foreseen in any sense as a project impact, but is a service response to the demand generated by campus occupants and their activities. Furthermore solutions developed by the industry on-site, such as traffic guidance technology (on-road and in-vehicle) are applied (and tested) locally. The ultimate recipients in the broader sense are vehicle and transport owners and users benefiting from better or alternative performance, road vehicle safety improvements, public transport innovation etc.</p>									
<p>Mainstreaming of gender equality and non discrimination</p>	<p>The project is gender neutral. However while the industry has traditionally been male-dominated, new opportunities provided by the campus particularly through research, training and education are opening up chances for more female involvement and employment. Otherwise the initiative is non-discriminatory and conceived as an open access venture.</p>									
<p>Intended outputs and results</p>	<p>The project was conceived to establish a physical entity, the Automotive House, which would act firstly as a driver and dynamo for the development of the HTA Campus. In parallel the facility (1 000m²) would then function as the promotional focus for the campus (a centre and facilitator for its activities) and for the automotive sector in the Netherlands, especially in terms of the strategy to develop its high-tech cluster in the South Netherlands. The clear intention is to contribute to national and regional economic growth and innovation by exploiting regional specialisation, advantages and experience.</p> <p>The site in Helmond was formerly the location of the Volvo Development and Test Centre. Following takeover by Mitsubishi and complete cessation of Volvo production in the Netherlands in 2004, automotive activity on the site was downgraded to the operation of the subsidiary engineering company Benteler. Therefore the creation of the Automotive House and Campus on the same location was a conscious option taken to support continuing Benteler activity, to establish a reuse of the industrial estate by automotive enterprises in general and to achieve this by attracting as many sector players as possible to locate or use facilities in a collaborative innovation-based cluster. A particular emphasis is placed on capturing private research and development investment.</p> <p>In line with the operational programme targets for Priority 1 – Knowledge economy, entrepreneurship and innovation – the project application envisaged the achievement of 2 direct and quantifiable results:</p> <table border="1" data-bbox="474 1384 1362 1554"> <thead> <tr> <th data-bbox="474 1384 927 1442">Indicator</th> <th data-bbox="927 1384 1098 1442">Project score</th> <th data-bbox="1098 1384 1362 1442">Contribution to OP-Zuid target</th> </tr> </thead> <tbody> <tr> <td data-bbox="474 1442 927 1525">Number of collaborations between businesses and knowledge/research institutions</td> <td data-bbox="927 1442 1098 1525">10</td> <td data-bbox="1098 1442 1362 1525">3.6%</td> </tr> <tr> <td data-bbox="474 1525 927 1554">Number of (net) jobs created (in FTE)</td> <td data-bbox="927 1525 1098 1554">175</td> <td data-bbox="1098 1525 1362 1554">34.3%</td> </tr> </tbody> </table> <p>Indirect effects anticipated:</p> <ul style="list-style-type: none"> • Strengthening of the business community and stimulating entrepreneurship: supply of appropriate and high-quality facilities and services. The HTA Campus is not orientated towards production but focuses on development and innovation by targeting innovative starters and SMEs on the one hand and research projects of end producers on the other. • Increase in employment opportunities: with a horizon of 2015, attraction of 3 business start-ups, 3 existing firms from the region (or Netherlands), 1-2 foreign companies Job growth forecast on site 584 (2008) – 1 505 (2015), over the whole territory of Helmond the municipality targets 2 000 jobs in the automotive sector by 2015 based primarily on developing innovative technology and 	Indicator	Project score	Contribution to OP-Zuid target	Number of collaborations between businesses and knowledge/research institutions	10	3.6%	Number of (net) jobs created (in FTE)	175	34.3%
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	<p>engineering solutions (Volvo alone had 3 000 workers in the high production period in the 90s)</p> <p>Student numbers forecast, involved in the sector 65 (2008) – 750 (2015)</p> <ul style="list-style-type: none"> • Improvement of image and profile: promotion and public relations • Improvement in working of the labour market: better cohesion and cooperation between education and training institutes and business – education and training tailored to the demand from the automotive business community.
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2. POLITICAL AND STRATEGIC CONTEXT

<p>National and regional framework for implementing ERDF funded urban development projects</p>	<p>The evolution of governance models in the Netherlands is characterised by a long-standing experience of impulse from the national level which results in interpretation and implementation at regional or local level. The Netherlands National Strategic Reference Framework identifies the greatest challenge as that of increasing economic growth in all regions. However particularly in response to the Lisbon objectives (EU as most competitive and dynamic global knowledge economy) the Dutch government initiated an ‘innovation platform’ in 2003 with the aim of strengthening forces for innovation, to bring the Netherlands into the international top 5 in terms of higher education, research and innovation capacity. The platform constituted by representatives of the scientific, political and business worlds launched an initiative which in the intervening years has played an important role as the policy framework for the development of innovation, open innovation and smart growth initiatives – ultimately resulting in projects like the Automotive House and HTA Campus. Known as the Key Sector Approach, the initiative directed attention at economic opportunity in the fields of: flowers and food; high-tech systems and materials; water; chemistry; creative industry. These key sectors identified as reflecting motivated business and societal ambitions were selected to drive related economic and business activity and to encourage diversity and global competitiveness. In operational terms this was further elaborated in the definition of innovation roadmaps or programmes for each sector, which were supported by the Ministry of Economic Affairs, Agriculture and Innovation.</p> <p>In the case of High Tech Systems and Materials this resulted in the setting up of a High Tech Automotive Systems programme (2007) which recognised the unique connection and position of the South Netherlands in terms of a concentration of automotive industries, skills and know-how. The goal is to develop the automotive industry through clustering of innovative products, processes and services, building on the remnants of the vehicle construction and research industry and the chain of supply companies in continuing operation. The crisis in vehicle production in the late 90s was translated into the collapse of DAF (NedCar) and the decline of Volvo in the Netherlands. The initial knee-jerk reaction was to give up the automotive sector, but a more considered reflection identified the potential of ongoing innovation, research and development linked to the strong presence of supply firms and the fact that there were still some 45 000 people employed in the automotive sector. More than half of the total employment in the sector in the Netherlands is located within the Eindhoven/South-East Brabant region.</p> <p>The South Netherlands Operational Programme (2007-2013) – OP-Zuid – refers to this policy background in the drive to confirm its territory as a top technological region at EU and global level. It reflects the key sector approach in its identification of knowledge axes as prime opportunities for the region (High tech systems, instruments and materials; Food and nutrition; and Medical technology and life sciences). It highlights specifically the potential of the automotive sector (‘the cluster high tech systems and materials includes specific products for the automotive industry, its suppliers and logistical services’) and creates an operational opening to support innovation in the designation of Priority 1: Knowledge economy, entrepreneurship and innovation. So the automotive sector today and in the future is a key client/user of high-tech systems and materials.</p>
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	<p>Thus there is a strong cohesion in innovation policy terms between the national, regional, provincial and local levels firmly coupled to the notion of <i>kennis, kunde en kassa</i> ('knowledge, skills and profit') and a tradition of <i>samen investeren</i> ('investing together'). Government facilitates, but the regional and local levels are experienced and skilled in forming the necessary alliances to implement policy at the 'local' level.</p>
<p>The planning context</p>	<p>At the level of Eindhoven City Region and in comparison with similar place-based growth and development strategies ('Airport' – Schiphol/ Amsterdam area and 'Seaport' – Rotterdam) the trademark concept of 'Brainport' was set out in 2006. Based on 4 strategic pillars (people, technology, business, basics) it represents a policy vehicle to exploit and develop the high technology profile of the city region. This area focuses around a third of both public and private investment in R&D in the Netherlands and in return is good for 25% of the country's exports, 50% of registered patents and contributes around 14% of the nation's gross domestic product (higher than Amsterdam or Rotterdam). Brainport represents the driving force to achieve 'top-technological region' status, promoting, but also realising, high-tech and innovation cluster forming confirmed by the presence of the High Tech Campus Eindhoven, the Health Technology Park Veldhoven, The Food Technology Park and High Tech Automotive Campus. The city region entity comprises 21 individual municipalities (including Helmond), which have had a history of strong co-operation over the last 40 years.</p> <p>So while the Municipality of Helmond develops its own economic and employment (growth) strategy and spatial planning (zoning) schemes, this is completely consistent with the response to the common structural vision, the strategic policy document framed in the Brainport concept. The Dutch Spatial Planning Act of 2008 requires municipalities, provinces and national government to set out their policy in one or more structural visions. In this way the Municipality of Helmond was ready to grasp the opportunity to drive the elaboration of the High Tech Automotive Campus (and therefore Automotive House) within its territorial jurisdiction, incorporated in the spatial planning and master planning process for site development.</p>
<p>3. IMPLEMENTATION</p>	
<p>3.1. PROJECT DESIGN AND PLANNING</p>	<p>Project idea</p> <p>The project was initiated by Helmond Municipality but is also embedded in the High Tech Automotive Systems programme instigated for the Southern Netherlands.</p> <p>Needs assessment or analysis</p> <p>There was no needs assessment or analysis carried out by the managing authority as such, in the sense that the 2007–2013 operational programme represents a logical extension of ongoing national, regional and local assessments of socio-economic parameters. Evolution and determination of strategy and actions is the result of a broad interactive understanding between governance levels, a sort of two-way ladder producing coherence of policy based on commonly agreed goals and objectives.</p> <p>Selection by the managing authority</p> <p>With the publication of the operational programme the managing authority effectively invites public and private actors to submit applications in line with the strategic priorities of the document. However in the case of opportunity for the automotive sector there was a strong common purpose explored at different administration levels, through the organisation of an Automotive 'sounding board' group. This involved a series of meetings between sector representatives and relevant public authorities to fix priorities and advise on a business plan for the HTA Campus which could then streamline an application by the municipality within the compass of Priority 1: Knowledge economy entrepreneurship and innovation.</p>

The application by the municipality, or other applications, also benefited from a number of explanatory meetings arranged by the OP-Zuid operational programme steering group to inform and shape proposals prior to submission – so maximising relevance and chance of acceptance.

Risk assessment

There was no risk assessment applied by the MA to this project. The establishment of the Automotive House is guaranteed by the commitment (including financial) of the Municipality of Helmond so the risk was considered to be negligible when set alongside the potential benefits to be derived from a successful HTA Campus development.

Envisaged sustainability, results exploitation and transferability

Objective evaluation of the automotive sector in the Netherlands following the late 90s crisis in the automobile industry suggested that contrary to perception this was in fact a strong sector of the Netherlands and particularly South Netherlands economy. While indeed vehicle production lost importance, the supply of high tech components, engineering, research and development was identified as being extremely buoyant. The sustainability of the project is therefore strongly linked to the forecast potential of innovation, new products and services which can be delivered within the know-how, skills and research environment of the Eindhoven City Region and its Brainport philosophy. The Automotive House is a key factor in the exploitation of results, which leads to more clustering and more take-up by clients. An underlying motivation driving the project is also that every action should ultimately lead to business and/or benefit for public and private research initiatives.

As the project is dealing with increasing competitiveness, transferability is not a prime consideration here, although experience in building high-tech campus solutions is building know-how in terms of collaboration and clustering which is and can be replicated in other thematic fields and locations within the Netherlands and beyond. The relationship between Eindhoven, Leuven and Aachen is a direct opportunity for extending knowledge and result-based networking in this sense.

It is clear that the Dutch multi-level governance model (establishing a common vision, dialogue and framework for policy-making and implementation at appropriate territorial levels, and a chain of financial support) represents an advantage in conceiving and setting up such an initiative. Similarly the high-tech tradition of the area and its connection with the automotive sector and former production strengths (supply and logistic services for instance) provide important contextual conditions. In this analysis therefore the idea of developing an automotive campus is not a strategy which can simply be transferred to another region or city. However where appropriate conditions exist (i.e. outward-looking university or research institutions, latent skills bank) the concept of establishing a triple-helix campus can form a valuable additional impulse for economic activity in certain locations. There are already many other examples of this kind of construction. In relation to the Automotive Campus therefore the idea is transferable but so are significant aspects of the process:

the applied evaluation of economic strengths and opportunities of a region or city resulting in support for potential of specialisation (in the Netherlands this is highly developed at multiple levels but this principle could be adopted relatively easily in other administrative frameworks);

the development of a flagship building or organisation, which provides high visibility of intention and action, is capable of bringing together the key players in the sectors targeted and will ultimately function as a management, facilitation and contact/communication centre for the wider development and extension of the initiative;

linking the activities on site to concrete solutions (in this case mobility) for the surrounding area, i.e. testing in the local community, results applied on public

transport, traffic/route management, new in-vehicle technologies.	
<p>Role of EU support and added value</p> <p>The project would have been pursued even without EU support. However it is unlikely that it could have been carried out on the same scale or at the same tempo. ERDF funding made it possible to achieve concrete results very quickly, which was a crucial aspect in firstly piloting campus formation, consolidating and ensuring a future for the sector but also in developing market share in a difficult transition time for the industry.</p>	
<p>Involvement of other EU funds</p> <p>There is no involvement of other EU funds in the project.</p>	
<p>3.2. MANAGEMENT, MONITORING AND EVALUATION SYSTEM</p>	<p>Selection of project manager</p> <p>In this case the approval of the project by the managing authority automatically transfers responsibility for the project to the applicant, within the Netherlands context of a commonly understood subsidiarity. That does not mean that the managing authority relinquishes its position of following-up or supporting the project where necessary. But the designation of the municipality as implementing body means that they are free to appoint the best qualified and experienced project manager from within their own organisational structure.</p>
<p>Delivery of the project</p> <p>Of the total project budget of €2.27 million, €1 million was assigned to establish the physical presence of the Automotive House. The project rents the ground floor of an existing building occupied by Benteler Engineering Services (and has already expanded to occupy part of the second floor). Any work or office space taken up by automotive companies or organisations is charged to them at the same rate, with the project and municipality taking charge of the management, coordination and common space allocated to this. The budget line covered the transformation and interior organisation of the building.</p> <p>A further €1.2 million was reserved for the setting up of the organisational, management structure of the Automotive House and HTA Campus, installation of offices and 10-person management team. The final €70 000 is guaranteed to cover initial losses to bridge the period until Automotive House is self-sustaining based on rental of space for activities by private bodies (conferences, workshops etc.), public subsidy and eventual private sector sponsorship.</p> <p>In terms of the ERDF funding, allocation is based on real costs whereby the Municipality of Helmond takes full responsibility for advancing funds to support the operational development of project and activities. This expenditure is then recovered through invoiced cost declaration.</p>	
<p>Steering process</p> <p>Within the managing authority, the Province of North Brabant, a dedicated department is assigned to the management of the operational programme. Known as Stimulus it guides applicants in the preparation of submissions, supports implementation, monitors financial progress and ensures communication of initiatives. This is also the organisation which manages the province's programme of subsidies to SMEs. Stimulus does have an interest in the content aspect of the project but this aspect is much more closely followed by the other frontline departments of the province responsible for economic growth and development.</p>	
<p>Monitoring and evaluation</p> <p>A six-monthly report is made to the managing authority on financial progress (which forms the basis for reimbursement of eligible costs) and project progress. This could be accompanied by a meeting with the evaluation steering group of the managing authority, Stimulus, but this is not common practice, again reflecting the tradition of agreed delegation of responsibility. The project did produce a mid-term review which allowed all parties to assess progress also on</p>	

	<p>the basis of the 2 programme-level indicators.</p> <p>Evaluation of results – targets and performance indicators</p> <p>On the basis of the target indicators set to satisfy operational programme priorities, the mid-term review already showed that the project had surpassed its target in terms of the number of structural collaborations established between businesses and knowledge/research institutions – 11 as opposed to the target of 10. In terms of full-time employment created, the mid-term figure was 68, in comparison with the final ambition of 175. This is a slower development of employment than anticipated and is probably a direct result of the crisis.</p>
<p>3.3 GOVERNANCE: PARTNERSHIP, PARTICIPATION AND EMPOWERMENT</p>	<p>Composition of the partnership</p> <p>Automotive House and its larger off-spring the HTA Campus is not a formal partnership binding the constituent organisations of the triple helix. However the evolution of the vision and implementation is the result of a comprehensive preparatory and ongoing dialogue between the key players in the automotive sector, representing all three strands of the triple helix. In this way the campus fosters open innovation by providing a home to research establishments, innovation-based institutes, automotive companies, government agencies, academics and highly-skilled students.</p> <p>Roles of the partners</p> <p>The public authorities with the Municipality of Helmond at the forefront take the role of facilitator and coordinator to create and maintain a platform for open innovation. The cluster formation in the specific and beneficial Eindhoven location fostered by the campus allows operational alliances and collaborations to be formed, dissolved and reformed in line with research or development opportunities (temporary, semi-permanent and even long-term co-operations are envisaged) especially between knowledge and enterprise stakeholders. The mutual interest is in generating business – growth in the sector, growth in the region and at national level and where possible cross-fertilisation with other high-tech clusters.</p> <p>Involvement of the wider public</p> <p>The project is firmly dedicated to encourage triple-helix engagement and therefore the direct involvement of the wider public was not a prime consideration. However primarily the test activities of agencies operating on the campus do interact with the local community. Helmond as a municipality for instance provides a real-life opportunity to test state of the art solutions for traffic and transportation. This can involve closing roads to allow testing of specific vehicles or applications. It means that innovative traffic guidance options are piloted or installed in the neighbouring street pattern and local car owners have been involved in developing experimental in-car congestion avoidance systems. The campus does have a contradiction in relation to the term ‘open innovation’. The Automotive House facility and the campus as a whole are open (in theory to all) but of course firms on site or in association are developing highly sophisticated products, equipment, systems and techniques and therefore there is also a pressure for non-disclosure in relation to market competition. In this sense the campus works on the basis of firm-to-firm open innovation while the Automotive House provides an informational and promotional focus which informs, attracts and involves SMEs along the supply chain or seeking to develop market opportunities.</p> <p>Role of the city administration</p> <p>Helmond municipality is both spiritual owner and driver of the project.</p> <p>Steering of the implementation process</p> <p>In the inception phase the project was guided by an informal organisation called the Automotive Advisory Council Helmond. This was substituted by the formation of a formal steering committee in the form of the HTA Campus</p>

Foundation to coordinate the operational project phase. This body was comprised of 3 representatives from each of the 3 main stakeholder (triple-helix) groups: 3 from the knowledge sector i.e. TU/e (Technical University Eindhoven); 3 from the business community including TomTom GPS; and the 3 administrative levels directly involved – province, Brainport region, Municipality of Helmond.

4. INNOVATIVE ELEMENTS AND NOVEL APPROACHES

4.1 INNOVATION

New approaches, management practices different from common practice

The project builds on the tradition of clustering and high-tech campus formation pioneered almost in this area of the Netherlands. So practices are not necessarily trend-breaking, rather adaptations of tried and tested models. On the other hand the establishment of the Automotive House in the campus formation process is an innovative initiative, as a highly visible element promoting the sector in general but also driving and facilitating the development of the campus – providing a focus of attraction for potential companies and institutes. This has been a prime mover in exploiting existing advantages (location, actors already on site) and bringing the 3 strands of the helix together in an operational relationship.

New approaches in exploiting and transferring the results

Here also the pioneering role of the Automotive House is perhaps the most interesting aspect in terms of transferability. Established and in operation since June 2009, it ensured that the campus organisation could quickly become fully operational and the number of agencies on campus expanded from the original 5 key actors (Programme Office High Tech Automotive Systems, Automotive Technology Centre, European Centre for Mobility Documentation, High Tech Automotive Campus project office, FIER Automotive) to 22 firms or organisations on site within the space of 2 years. It is doubtful that this could have been achieved so quickly without the impulse of the Automotive House particularly in a period which globally and locally experienced a downturn in investment. This has even allowed the HTA Campus to approach the possibility of being regarded as of ‘national importance’ – a statute which only the High Tech Campus Eindhoven has in the Netherlands at the moment.

The activities which can be organised in the Automotive House are also significant in disseminating achievements and promoting systems and products developed by the automotive cluster.

The strength of this case lies in the capacity of the initiative to exploit the particular contextual advantages in administrative, economic and territorial terms. The establishment of the Automotive House established a key focus for all authorities and stakeholders concerned and required to achieve success. In this way, it provided everyone with an assurance that something would happen and a basic structure around which to build the other campus activities. It is evident that the Dutch governance model cannot simply be replicated in another member state and that certain significant parameters are key to this particular intervention (high-tech locality, ‘Brainport’ impulse, presence of skills and companies looking to cluster. However there is a lot to be learned from the way in which this initiative has been developed and implemented which could be applied in other situations (even less sophisticated cooperation structures):

- establishment of a pilot entity to guarantee and drive the concrete initiative (no need to wait for state of the art new build or architectural intervention)
- high visibility and opening of dialogue with essential sectors and stakeholders
- management of public leverage, delegation of coordination and facilitation to appropriate management structure

4.2. KEY IMPLEMENTATION CHALLENGES AND PROBLEM-SOLVING PRACTICES

	<ul style="list-style-type: none"> - exploitation of local strengths - specialisation based on former, existing and/or future assets <p>In this sense any region or city considering development or support for triple-helix initiatives could benefit from an examination of the way things have been done in Helmond.</p> <p>Main challenges during project implementation</p> <p>The main challenge affecting the lifecycle of the project was the difficult economic and financial climate in which it was developed. Forecasts anticipated the location of two or more large-scale companies but in fact only smaller organisations have physically located on the site. This has implications for employment targets but also benefits in terms of the diversity of the cluster.</p>
<p>4.3. THEMATIC FOCUS</p>	<p>Europe 2020 smart growth</p> <p>The ERDF funding involved in this case is allocated to support the establishment of the <i>Automotive House – Spil van de High Tech Automotive Campus</i> ('Automotive House – Lynchpin of the High Tech Automotive Campus'). In this project title it is clear that the ultimate objective is the development and operation of the HTA Campus which is strongly founded on the triple-helix open innovation principle and therefore particularly relevant to any smart growth strategy.</p> <p>Confirming this relevance is the location of the initiative in the Eindhoven region, one of the cradles of high-tech innovation in Europe and with a global reputation. The Philips company, founded in Eindhoven in the 19th century, developed a 'high-tech' facility in the city as early as the 1960s as its most important invention centre – eventually becoming the High Tech Campus Eindhoven. Since 2002 non-Philips companies have also been encouraged to locate on the site on condition that their activities are linked to the operations on campus. This open innovation response was surely influenced by the impact of globalisation pressures on Philips activity but equally resulted from the realisation that joint research and development could have significant added value through mutual reinforcement and inspirational solutions. Since 2006 the High Tech Campus Eindhoven is even physically open to all business and non-business users.</p> <p>The extension of this growth and development logic in the 'Brainport' strategy to create a top-technology hotspot in different fields across the Eindhoven city region and including the High Tech Automotive Campus is a further confirmation of smart growth credentials.</p> <p>The spur to the stabilisation and future expansion of the automotive sector through this initiative (in the Netherlands) is firmly not about simply preserving existing operations in the area. The support and encouragement for campus activity is based on developing cutting-edge technology, indeed to confirm the viability of existing activities but also to weather-proof these in relation to future developments in the sector. More importantly activity is geared to anticipating the development of new technologies so that the supply chain can benefit and respond accordingly, but also to drive the introduction (research and develop) of innovative techniques and systems which will define the future of the automotive sector on the global stage. The triple helix operates equally as an insurance to guarantee the local skills levels required to serve the industry in the widest sense (IT, mechanics, precision engineering, design etc.)</p>
<p>5. FUNDING</p>	
	<p>ERDF funding and match funding</p> <p>There is no pre-financing of project activity from ERDF. Funding works on the basis of reimbursement of real costs incurred and reported in the 6-monthly reports (finance and content) to the managing authority. The Municipality of Helmond pre-finances all activity.</p> <p>Private sector leverage</p>

With a view to further strengthening the economic impact of the HTA Campus and creation of additional technical facilities, HTA Campus Foundation has taken the initiative to develop an Automotive Facilities Brainport Centre on the site. This centre works on the basis of a 'sharing principle' and required an €18 million investment to develop automotive test facilities, work stations, laboratories, and offices for use by automotive SMEs.

€9 million was made available by the Ministry of Economic Affairs, the Province of North Brabant and the national initiative programme *Sterke Regio's* ('Strong Regions'). The Brainport Development agency assisted in the detailing of the business plan, with private investment, notably from the VDL Groep (bus and coach development) and TNO (tools for safer, cleaner, efficient transport) mobilised and committed to make up the remaining part of the budget. In this way it is clear that there is still impulse from the public purse but that private initiatives will progressively dominate the ongoing development.

This larger stimulus from the public sector in partnership with key private operators represents a hands-on intervention to actually implement innovation, designed to run alongside (and leverage) the attraction of private business and research enterprises and provide a complementary service for automotive companies and organisations.

6. PROJECT ASSESSMENT

6.1. FINANCIAL SUSTAINABILITY

Sustainability

While a national budget deficit is forecast for the Netherlands in 2012, many commentators in the Dutch automotive sector report an easing of the crisis in the sector. The realisation in the early years of this century that, despite closure of vehicle production, in fact the sector was still viable and even strong, was an important driver for public sector support. In terms of the HTA campus the public funding impulse has broadly realised the development of the physical and structural basis envisaged, so the developments and attraction of new residents and investment on site will now determine the sustainability. In this sense the progress so far seems to give reason for optimism and particularly the fact that the Campus enables cutting-edge R&D should weatherproof the initiative and the different stakeholders from fluctuations in the automotive market. However global conditions and capacity to respond will be the ultimate determining factor here.

6.2. TRANSFERABILITY

Continuity from previous funding periods

The project did not start in a previous funding phase

Mainstreaming

The project did not start as a pilot action but is a further application of clustering and the campus model pioneered in the Netherlands by the High Tech Campus integrated with the activities of the Philips company whose headquarters, research and production are inextricably linked to Eindhoven.

Transferability

The project and the High Tech Automotive Campus are particularly bound to the context of the Eindhoven Region, the past pattern of economic (automotive) activity and the high-tech impulse which characterises the city and its surroundings. From another perspective the evolution and implementation of the project is in process terms embedded in the governance model of the Netherlands which is sophisticated but also specific. In this sense the principle of encouraging and developing triple-helix clusters is without doubt transferable and the experience of Brainport and the project can provide a valuable insight on how to achieve this. The manner in which the process is managed and results delivered is however much more difficult to replicate because of the contextual specificities.

6.3 ISSUES AND PROBLEMS

The difficulties experienced by the project are primarily linked to achieving project goals in a competitive sector in a period of economic recession.

	<p>Nevertheless it cannot really be said that the project has stuttered because of this.</p> <p>In organisational terms the project did bring to light a specific difficulty in relation to the management and operational structure of the HTA Campus. It was recognised that the presence of the Automotive Technology Centre, the High Tech Automotive Systems programme and the Automotive House and HTA Campus all had separate management structures. All of these organisations benefit from significant public sector support but it became clear that there was considerable overlap in both organisation and service delivery, duplication (or triplication) of responsibilities and personnel. A review was carried out which has resulted in the slimming down of all 3 organisations with the establishment of one over-arching management structure to run and coordinate their activities – Automotive NL.</p>
<p>6.4 PROJECT OUTPUTS & RESULTS</p>	<p>The results of the project have been broadly achieved in the setting up and bringing into operation of the Automotive House and the HTA Campus. In respect of the attraction of firms, organisations and institutes to locate on campus, progress has been slower than hoped for and more characterised by the presence of smaller firms. This has impacted on the target of achieving 175 full-time jobs, and the project is still some way short of this figure at the present time. The economic crisis has clearly had an effect in slowing down take-up of sites. Similarly the anticipation that technical school departments or research faculties would transfer to the campus has not been met. On the other hand the target to achieve 10 collaboration projects between business and knowledge/research has been surpassed in the formal sense of contractual engagement and more so in the informal exchanges generated by the campus formula.</p> <p>The number of organisations, representing all three strands of the triple helix, located on site or using the Automotive House and Campus facilities, is evaluated as highly satisfactory by the steering HTA Campus Foundation and this dynamic is continuing, and is expected to intensify as the crisis eases. The diversity of activities developing on campus is both complementary and innovative, with organisations working on: driving guidance; traffic guidance and road safety; communicating vehicles; development of efficient vehicles (in terms of CO₂ emissions), vehicle electronics and diagnostic systems; crash and other test centres; homologation labs; design and prototype construction; technical skills and employment training; mobility management; high-tech and precision engineering solutions and public transport improvement. 30 organisations are now on site and actively involved in the working of the campus. Vocational training, technical schools and universities may not have developed full educational facilities in the campus but they have outpost locations and the firms operating on campus are used to provide practical work placement for students and ‘on the job’ technical training within their course focus (for instance a bachelor course in automotive engineering).</p> <p>As a result the slower level of progress is not regarded as a failing of the project but rather there is a conviction that this that will catch up in time.</p>
<p>7. CONCLUSIONS: KEY SUCCESS FACTORS AND LESSONS LEARNED</p>	
	<p>The project is specifically conceived to exploit the location and intrinsic strengths, know-how and skills available in the Eindhoven Region.</p> <p>The bringing together of people from the sector and from all 3 strands of the triple helix (more important than organisations) in all stages of the process.</p> <p>Perseverance when results are often not visible and where the ambitions of the outside world prove difficult to manage.</p> <p>Swiftness of decision-making and putting vision into practice – the project has achieved much in a relatively short, or even very short, time</p> <p>The facilitation role of the public sector and the Automotive House has been particularly important in promoting a common understanding and selling the opportunities and possibilities to the sector and beyond.</p>

8. FURTHER INFORMATION

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