

eagar®



EUROPEAN ASSESSMENT OF GLOBAL PUBLICLY FUNDED AUTOMOTIVE RESEARCH

Publicly funded automotive research in France

Acknowledgements

Authors:

Simon Vinot, Jerome Sabathier, IFP

Fabian Schmitt, Ika

This report is a deliverable from the Project EAGAR, “European Assessment of Global Publicly Funded Automotive Research, Targets and Approaches”, supported by the Seventh Framework Programme.

Project Number: 218529

Duration: September 2008 until October 2010.

EAGAR Partner Organisations:

- AVL LIST GmbH, AUSTRIA
- RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN, GERMANY
- RICARDO UK LIMITED, UNITED KINGDOM
- FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V, GERMANY
- IFP-INSTITUT FRANCAIS DU PETROLE, FRANCE
- IDIADA AUTOMOTIVE TECHNOLOGY SA, SPAIN
- NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK – TNO, NETHERLANDS

Website: www.eagar.eu

Paris, April 2010

TABLE OF CONTENTS

1	INTRODUCTION.....	4
1.1	Background.....	4
1.2	Objectives.....	4
1.3	Methodologies	4
2	DESCRIPTION OF THE MAIN WP RESULTS.....	6
2.1	General Information and Automotive Data	6
2.2	National Funding Organisations and Hierarchies for Automotive Research	8
2.3	Automotive Visions and Strategic Research Agendas	11
2.4	Funding Programmes.....	12
2.5	The efficiency, flexibility, and experienced bureaucracy of the funding process.....	16
3	DISCUSSION AND CONCLUSION	18
4	REFERENCES.....	19
5	ANNEX	20

1 Introduction

1.1 Background

The FP7 project EAGAR benchmarks the current public automotive research activities at international level, in particular the European Union with Brazil, Canada, China, India, Japan, Malaysia, Russia, South Korea, the United States and 13 EU Member States.

EAGAR identifies the national road transport visions and roadmaps, research priorities, supported key topics, technology pathway, as well as the level of investment. This enables a direct comparison of national automotive R&D policies relating to the environment, safety and congestion.

The EAGAR study provides a key perspective on global investments designed to improve automotive vehicle technologies for a greener, safer and smarter road transport system.

1.2 Objectives

This deliverable report summarises the situation of the RTD funding system in France with respect to published vision statements, research targets and roadmaps, the national funding programmes of the past 4 years and the governance of automotive RTD funding in France.

The report is basis for the subsequent benchmarking analysis, which delivers the key results of EAGAR addressing the following issues:

- Overview of national road transport visions, research agendas and roadmaps
- Comparison of automotive research priorities and investments focused on vehicle technologies
- Characteristics of national automotive research funding systems and approaches
- Highlight areas of strenght and weakness I European RTD compared to the analysed countries
- Potential international cooperation areas from a European perspective

This study benefits the competitiveness of Europe and enables the stakeholders to adjust its visions & plans for the future. Date of publication: September 2010. It is available from the EAGAR website

WWW.EAGAR.EU

1.3 Methodologies

This country report is based on comprehensive investigations via desk research, information from the responsible programme managers and individual feedback from experienced project managers and researchers. The methodology used was developed in the first months of the project. It is consistent for all target countries. The data collection was mainly done from May to November 2009.

The four main categories are:

- General and automotive data about the country
- Published challenges, visions, targets for automotive research
- Funding organisations and hierarchies for automotive research
- National public funding programmes with dedicated calls or permanently open between in the years 2006 to 2009.

Disclaimer

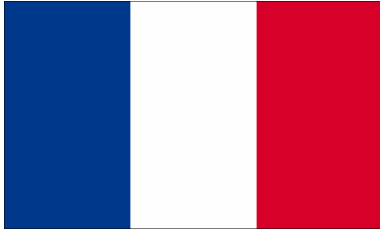
This document presents quantitative and qualitative data from various sources. Due to the complexity of the project and the large amount of sources of data, regularly changing during the duration of the project, it was not possible to thoroughly validate all details. The EAGAR project partners cannot guarantee that the data presented is either complete or correct. The value of some of these data is mainly explorative, as a first step in an indicators development process. In conclusion, the data provided here may be difficult to interpret, are not exhaustive and may need further development. Comments by stakeholders on the coverage, relevance and interpretation of the indicators

provided, as well as observations on new indicators that could be employed to improve the analysis of publicly funded automotive research are welcomed by the EAGAR project consortium. Any quotation of the data in this document should make reference to the above disclaimer. The EAGAR project partners and EC accept no liability for any issues that arise from actions that may be taken as a result of reading this report.

2 Description of the main WP results

2.1 General Information and Automotive Data

Metropolitan France extends from the Mediterranean Sea to the English Channel and the North Sea, and from the Rhine to the Atlantic Ocean. France is the largest state in the European Union by area and the second largest in Europe behind Ukraine.



France has been a major power for many centuries with strong economic, cultural, military and political influence with a population of 61.876.000 inhabitants including the overseas territories. France is one of the founding members of the European Union. It is also a founding member of the United Nations, and a member of the Francophonie, the G8, G20, NATO, OECD, WTO, and the Latin Union. It is one of the five permanent members of the United Nations Security Council, possesses the third largest number of nuclear weapons in the world and the largest number of nuclear power plants in the European Union.

France is a developed country and possesses the fifth largest economy by nominal GDP with 1892 billion euros in 2007 and eighth largest economy by purchasing power parity. It is the most visited country in the world, receiving 82 million foreign tourists annually.

The role and importance of road transport in France and significance of domestic automotive industry

The car market is mature in France as there are more than 500 passenger cars for 1000 inhabitants¹. The motorised two-wheelers market is currently booming especially in the French big cities like Paris, Marseille, and Lyon to avoid the increasing problems of traffic congestion.

Number of passenger cars per thousand inhabitants	508	cars/1000hab	2007
Motorised two-wheeler sales or newly registered p.a.	238966		2007
Passenger car sales or newly registered p.a.	2604543		2007
Commercial vehicle sales or newly registered p.a.	519492		2007

Source: CCFA – French Car Makers Association

The road network is well developed in France and commonly used. Despite a strong rail infrastructure for freight transport, more than 219 billion tonne-km have been transported by road in 2007² which represent the main share of transportation in the country.

¹ Source: French Car Makers Association

² Source: European Commission - Statistical pocketbook 2009

EAGAR – Publicly funded automotive research in France

Passenger-km travelled by road	774 920 000 000	pass-km	2007
Tonne-km goods transported by road	219 210 000 000	tons-km	2007

Source: European Commission - Statistical pocketbook 2009

France currently manufactures 3.5 million vehicles on 20 different assembly sites, which makes it Europe's second leading manufacturer, accounting for 17.1 % of total European production. France's two leading manufacturers – PSA and Renault – are respectively ranked 8th and 10th worldwide. They offer significant opportunities for the supply industry, which has enabled an efficient supply chain to be built up around international companies such as Faurecia and Valeo. The French automotive industry employs a total of 275,000 people, not including the further 400,000 people employed in related parts supply and service sectors for a total turnover exceeding 109 billion euros for the year 2007³.

Automotive industry turnover	109 300 000 000	EUR	2007
Automotive industry number employed	275000	person	2007

Source: CCFA – French Car Makers Association

National spending and funding for research and technological development

Every year, France spends around 28 billion euros in R&D activities and only 10 % of this sum comes from public sources. The private sector is the major spender followed by the foreign companies. In terms of R&D intensity, France spends 1.5 % of its GDP for R&D activities⁴.

Total RTD spend	28 703 000 000,00	EUR	2005
Public total RTD spend	2 615 000 000,00	EUR	2005
Private total RTD spend	20 320 000 000,00	EUR	2005
Foreign total RTD spend	5 768 000 000,00		2005

Source: EAGAR

Focusing now on automotive, the generally accepted data show that approximately 4.5 billion euros are spent annually for R&D activities. There again, the main part is funded by the private sector and only 16 million euros of public funds have been officially given to automotive RTD in 2005. This figure can be discussed as sometimes the French statistics do not register some activities as automotive related.

Total automotive RTD spend	4507000000	EUR	2005
Public automotive RTD spend	16000000	EUR	2005
Private automotive RTD spend	4491000000	EUR	2005

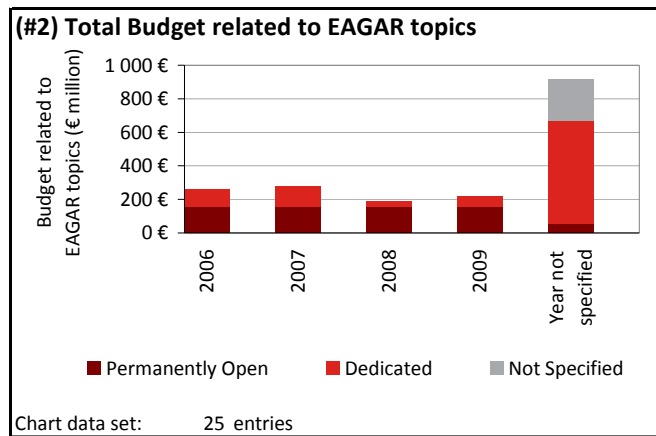
Source: EAGAR

The automotive RTD spend over time is quite stable in France. Around 200 million euros are spent on a yearly basis and if 2008 and 2009 show a little decrease this may be explained by the delay in the public dissemination of the results of public fundings. A lot of money is assigned to the columb

³ Source: French Car Makers Association

⁴ Source: French Car Makers Association and INSEE

"year not specified" as a lot of calls are in preparation in France due to the new PREDIT programme, the results of the Grenelle and the recovery programmes for the automotive industry.



Source: EAGAR

2.2 National Funding Organisations and Hierarchies for Automotive Research

The structure and governance of the national funding system

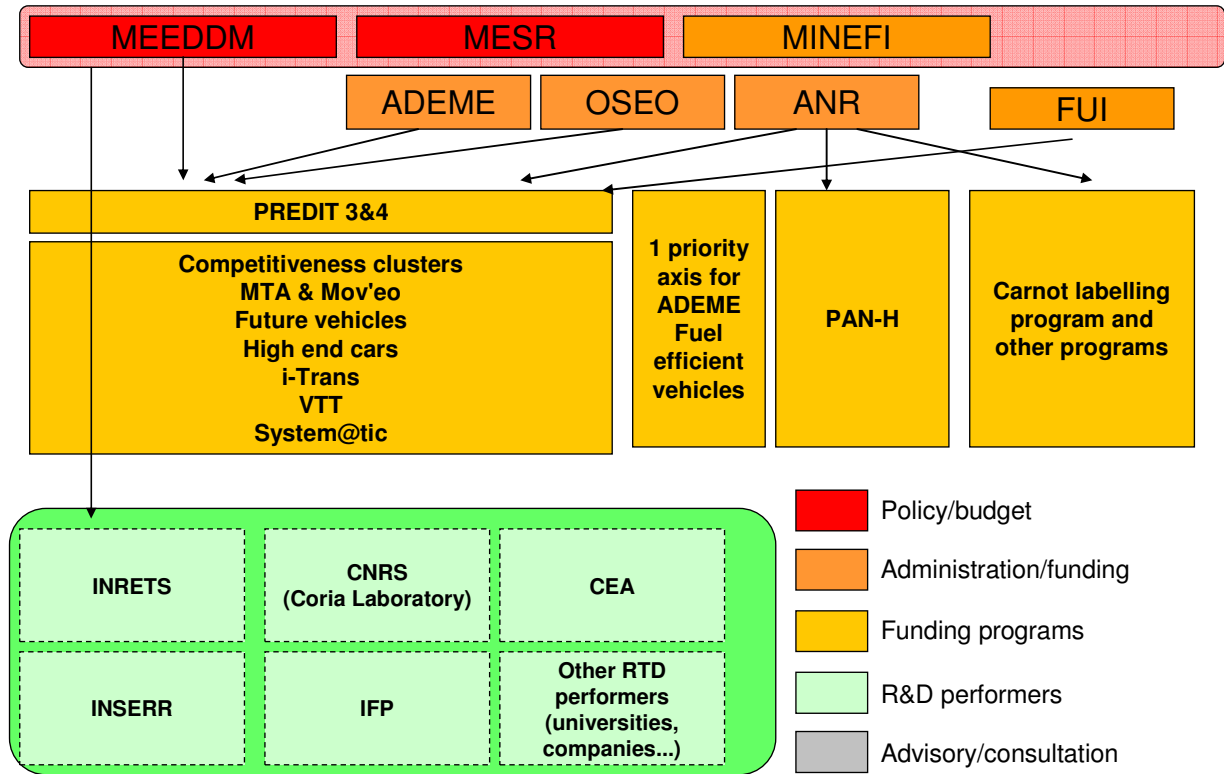
Public funding in France comes from various sources. On the top rank, the Ministry for Energy, Environment, Sustainable development and the Sea (MEEDDM, former MEEDDAT), the Ministry for Education and Research (MESR) and the Ministry of Economy, Finances and Industry (MINEFI) are the main sources of money and are funding the biggest programmes in France like the PREDIT for the transport sector. Then, the National Research Agency (ANR) usually is the main source of funding for programmes and projects which can be completed by funds coming from the OSEO organisation or the ADEME (the French Agency for Environment and the Management of Energy). A less common source of money is the Unique Inter-Ministry Fund (FUI), which has funded some programmes in the past.

Usually a programme will combine funding from several sources which lead to a very complex modulus operandi with several steps to distribute money.

Some other organisms can interfere in the process like the Ministry of Research of the Ministry of Economy and Industry.

Overview of the research organization in France – focus on automotive R&D

EAGAR – Publicly funded automotive research in France

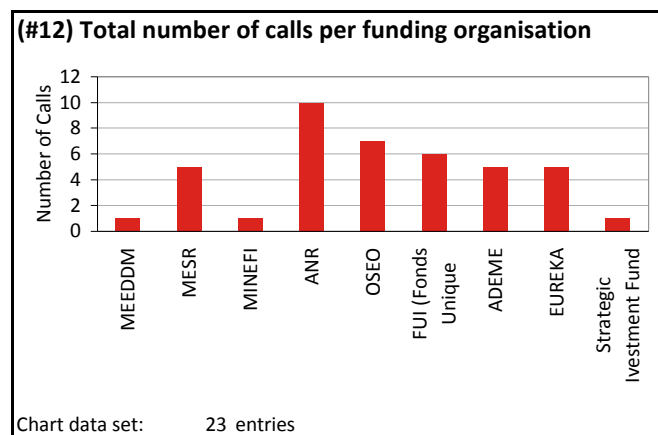


Source: EAGAR

Funding organisations and key players

The main funders of automotive RTD in France are ANR, the different Ministries which have been quoted earlier, and OSEO, which fund more than half of the calls, usually they are all involved in the funding of a programme call and they share the funding. On the local scale, some local authorities like departments or regions can be lead to fund a project or a programme from time to time but with very limited resources. This type of funding has been identified for some projects in the competitiveness clusters for example.

The Ministries may not have a lot of calls but they fund the biggest R&D organisations in France and thus, support the biggest spendings.



EAGAR partners have identified the main sources of funding for the automotive R&D in France. Five players have been considered as relevant:

EAGAR – Publicly funded automotive research in France

MEEDDM	http://www.developpement-durable.gouv.fr/
The MEEDDM is the ministry in charge of energy, environment, sustainable development and Sea	
MESR	
The Ministry of Superior Education and Research drives the national policy in Universities and settles the direction for the technology research in the country. It has the main authority on most of the public research institutes.	
MINEFI	http://www.minefi.gouv.fr
The Ministry of Economy, Finance and Industry is responsible for the funding of the public organisations in the country.	
ANR	www.agence-nationale-recherche.fr/
The National Agency of Research has been created on 1 January 2007 to fund research projects in: -biology and health -ecosystems and sustainable development -sustainable energy and environment -engineering, process and safety -matter and information -social sciences	
OSEO	www.oseo.fr/
OSEO was founded in 2005, by bringing together ANVAR (French innovation agency) and BDPME (SME development bank), around a mission of general interest supporting the regional and national policies. Its mission is to provide assistance and financial support to French SMEs and VSEs in the most decisive phases of their life cycle: start up, innovation, development, business transfer / buy out. By sharing the risk, it facilitates the access of SMEs to finance by banking partners and equity capital investors. OSEO covers three areas of activity : <ul style="list-style-type: none">• Innovation support and funding : for technology transfer and innovative technology-based projects with real marketing prospects.• Funding investments and operating cycle alongside the banks.• Guaranteeing funding granted by banks and equity capital investors. OSEO's head structure is a holding with public status. It reports to both the Ministry for Economy, Finance and Industry and Ministry for Higher Education and Research.	
FUI (Fonds Unique Interministériel/Single Interministerial Fund)	
The FUI funds R&D projects from competitiveness clusters. These projects have to be qualified after a call and a funding of € 600 million has been made available for the period 2006-2008 in the budget of the Ministry of Economy, Finances and Industry. The projects which will be supported must be collaborative R&D projects, within a cluster and involve at least two private companies and a laboratory or a research centre.	
ADEME	http://www2.ademe.fr/
The French Environment and Energy Management Agency is an industrial and commercial public agency, under the joint supervision of French Ministries for Ecology, Sustainable Development and Spatial Planning (MEDAD) and for Higher Education and Research. Its mission is encouraging, supervising, coordinating, facilitating, and undertaking operations with the aim of protecting the environment and managing the energy in key areas like energy, air, noise, transport, waste, polluted soil and sites, and environmental management.	

Remit for organisations & calls: overlaps or conflicts

The funding process is quite complex and as some programmes can combine different sources of funding, the picture gets even more confusing.

Inside programmes it seems there are many overlaps. The main programme called the PREDIT also spreads money for the competitiveness clusters, which lead projects, which can be created inside the research technical organisation like IFP, CRNS or CEA.

2.3 Automotive Visions and Strategic Research Agendas

Significant challenges for the national road transport sector.

The main challenges for the French automotive industry are concentrated along three axis:

- competitiveness
- safety
- environmental issues

Visions & focused targets for road transport

To overcome these challenges, several initiatives have been mounted to give visions to the development of France towards a sustainable future.

- **Etats generaux de l'automobile - Automotive Pact:** To help the automotive sector and increase its competitiveness, subsidies are to be given to French carmakers to keep people employed in France instead of delocalizing plants to countries with low wages
- **Etats Generaux de la sécurité routière** – National Safety Committee
- **Climate Plan:** This plan aims at reducing the total GHG emissions by 54 million tons of CO2 equivalent by 2010.
- **Recommendations from the Strategic Analysis Committee:** "The Centre d'Analyse Stratégique" (CAS) is an organisation working directly under the direction of the Prime Minister and its objective is to assist the government in defining and implementing its economic, social, environmental, and cultural policies.
- **Grenelle de l'Environnement** - Environment Round Table: The aim of the Environment Round Table is to define the key points of government policy on ecological and sustainable development issues for the coming five years.

In terms of target, the transport sector is mainly concerned by the achievement of the 20 % GHG emission reduction target by 2020 and as the cause of a major contribution is also involved in the following of the "Factor 4" plan which aims at reducing by 4 these emissions by 2050 from the 1990 level . The transport sector can also help achieving the 20 % use of renewable energy by the integration of biofuels in the road fuels. This has already started in France.

Target name	Corresponding challenge	Description including addressed research themes, technologies	By date	Reference	Year
Facteur 4	environmental	In 2003, France made the commitment to reduce its overall CO2 emissions by a factor of	2050	Facteur 4	2003

EAGAR – Publicly funded automotive research in France

		4 before 2050 from the 1990 level.			
Biofuel incorporation	environmental	5,75% of biofuels in 2010	2010	National Energy Strategy	2005
Number of killed on the road	safety	Less than 3000 killed per year in 2012	2012	Etats Generaux de la Sécurité	2007
3 x 20 in 2020	environmental	Reducing emissions by 20% over the next 12 years Use 20% of renewable energy sources in the mix	2020		2008
Rail freight transport		A 25% increase in the proportion of rail freight in the goods transport market should be reached by 2012	2012		2008

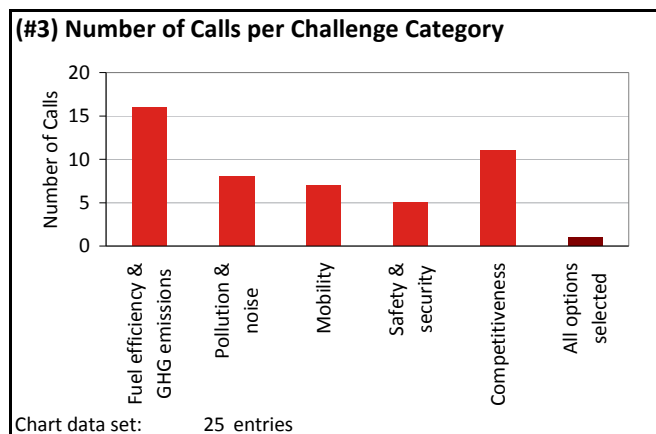
Source: EAGAR

The targets are measurable, but they may be too global to be effective: they address global challenges like the GHG emissions on a national scale.

2.4 Funding Programmes

The link between vision & targets and funding allocation

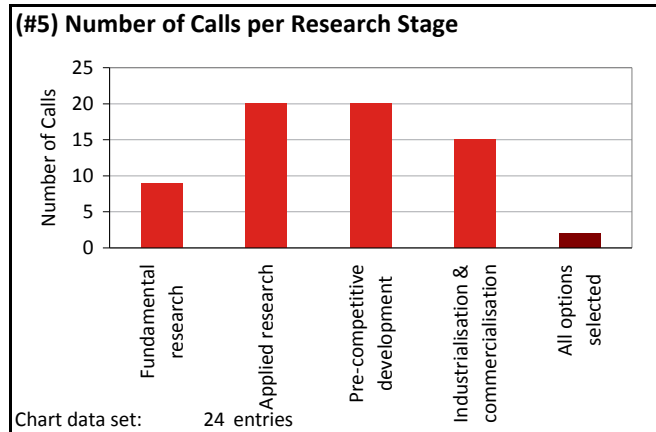
In line with the challenges France is trying to face, the number of calls reflects the predominance of the environmental issues with the fuel efficiency and the GHG emissions as well as the pollution. On the second rank, the competitiveness challenge receives a lot of calls when matters like safety and security receive a significant number of calls.



Source: EAGAR

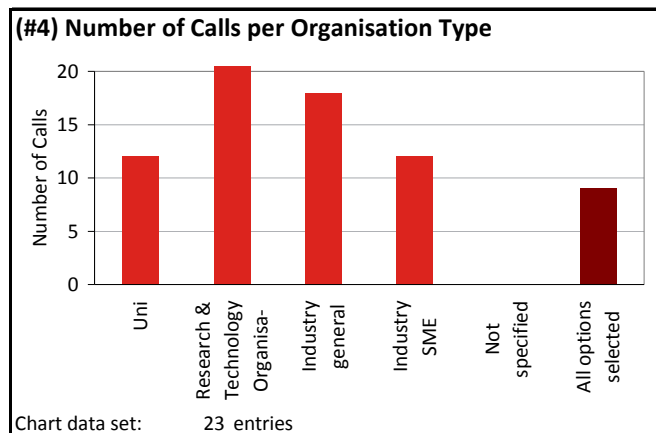
Funding programmes and states of RTD as well as different types of instruments

The French public RTD is mainly focused on applied research and pre-competitive research. Industrialisation is mainly left to the car makers and fundamental research receives less calls but remains important.



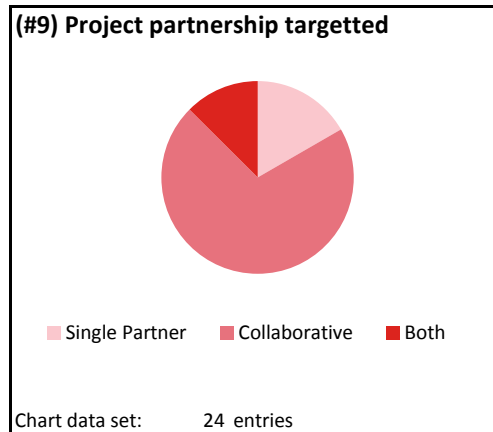
Source: EAGAR

An important part of the public automotive R&D in France relies on the work of public RTOs such as IFP, CNRS or CEA among others. Industry (in general) is also involved, mainly through collaborative projects which receive funds. In most cases these projects are run under competitiveness clusters or occur in the PREDIT.



Source: EAGAR

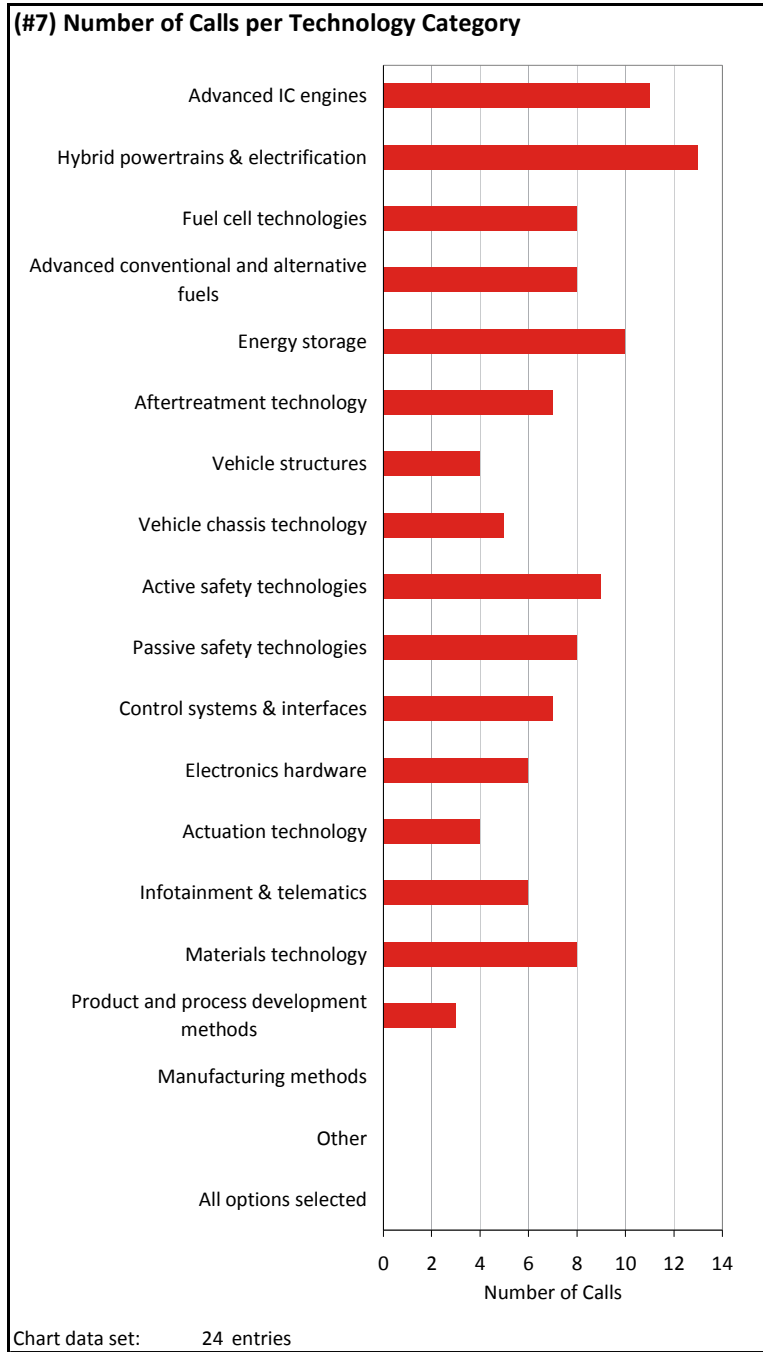
Due to the role of RTOs, a lot of projects appear to be single partner projects but the treatment of the information had a distortion effect: collaborative work remains a priority for the public automotive R&D in France in order to ensure a global share of knowledge and a good synergy.



Source: EAGAR

Overview of technology specific programmes for automotive RTD

France has a wide panel of RTD activities in the field of automotive. The landscape is very comprehensive as all topics are covered; the only exception being the manufacturing methods where no RTD activities could be identified during the research of the EAGAR project. The technologies for powertrains concentrate a lot of activities on hybrid powertrains and electrification along with energy storage. But at the same time a lot of research is still ongoing in the field of advanced IC engines as the two French car manufacturers have not given up on the engines and hope to create great improvement potentials in the next years.



Source: EAGAR

During the data collection process, EAGAR partners have identified 21 initiatives receiving money from 7 funding organisations.

Total number of Programme Calls	25	
Total number of Programme Initiatives	21	
Total number of Funding Organisations	7	
Total Budget related to EAGAR projects	1 867 € million	

Source: EAGAR

From all the funding programmes, we may highlight the most important ones:

- PREDIT 3&4: PREDIT is a programme of research, experimentation and innovation in land transport, started and implemented by the Ministries in charge of research, transport, environment and industry, the ADEME (French environment and Energy Management agency) and the OSEO.
 - PREDIT 3 (2002-2006) was officially launched on 19th March 2002, after a draft agreement was signed by the four ministers and two agency directors who promoted the programme. PREDIT 3 will be marked by a specific effort put on goods transportation and energy and environment issues, green-house effect in particular, as well as a diversified research on safety. This third programme has been given about 300 million Euros in public funds.
 - PREDIT 4 (2008-2012)
- Battle for Electric Car: This is a government initiative to help launch the EV in France by financing a fleet of cars, the buy of charging infrastructures to reach a market by 2020.
- the competitiveness clusters which launch collaborative projects with industry like
 - iD4Car
 - MOV'EO
 - MTA
 - LUTB 2015
 - Véhicules du futur
 - System@tic
- the public institutes or public research organisms like:
 - INRETS
 - IFP
 - INRIA
 - INSERR
 - CNRS
 - CEA

2.5 The efficiency, flexibility, and experienced bureaucracy of the funding process

The following results are based on a questionnaire elaborated by EAGAR partners and sent to different experts of funding processes in Europe and in France. This information is based on the panelists' opinion and EAGAR partners cannot guarantee that this information is correct nor complete.

The flexibility to release new calls in response to changing situations

The application process

The panelists have the perception that the application process is quite flexible and they feel that the scheduling of calls accommodate new topics in a very good way both from ANR and FUI but if you missed a call, the chance to get another one can be as long as two years. Furthermore the process takes some months to get an answer. Three to six months for the ANR and one to three months for the FUI might be necessary and then another six months are needed to make the project start. In the end, the panelists all had the impression that the process is long, complex and that they can face a heavy bureaucratic process, depending on the French funding organisation they deal with.

Experienced success rates

The experienced success rates might vary from a funding organisation to an other. The baseline is that out of the 16 proposals made by people who answered the questionnaire, between 25 and 50% were successful.

Three to six months for the ANR and one to three months for the FUI might be necessary and then another six months are needed to make the project start.

Regarding the transfer of funds, it seems that everything runs fine as the process has been described as working "very well".

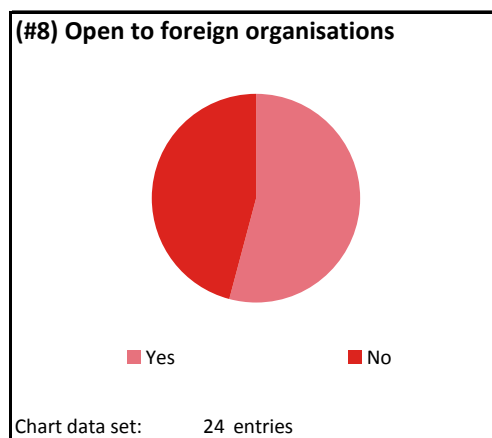
Funding process – exploitation and feedback

Furthermore, not many details have been found about the dissemination activities after a programme. Regarding desk research it is not clear what materials have to be publicly disseminated. Not all calls require a description or an exploitation plan. In some cases, like for the RTOs the RTD is performed internally and no dissemination is done. In most of the calls, a final report is required and some other data might be part of the deliverables such as publications.

On the other hand there is no way for the applicants to give feedback on the funding system.

Foreign collaboration

The French programmes are quite balanced in terms of openness towards foreign organisations. Most of the national programmes can be available for foreign partners (calls from ANR and FUI are available to foreign partners) but as some RTOs are performing their own research; these activities stay confidential and self-centred.



Source: EAGAR

3 Discussion and Conclusion

The publicly funded automotive R&D in France as presented in this report was mainly analysed by desk research. Altogether, 25 funding programmes from 7 funding agencies have been identified and analysed. Almost all information of the federal spent R&D funding is available on the internet, either on the respective websites of the funding agencies or on the web-sites of the French ministries. The desk research as well as the distributed questionnaires also lead to a subjective interpretation of the French R&D policy and R&D programmes where statistical data or specific information are missing. Nevertheless the available information on the considered programmes does allow a deep analysis of the French policy, identifying trends as well as benchmarking with other economies. The presented information and data just provides a global picture of the French R&D policy and should be used as this.

In terms of organization the two main poles of automotive RTD are the RTOs on one side and the funded projects from the PREDIT and the competitiveness clusters on the other side. All these R&D activities are under the authority of the Ministry of Energy, Environment, Sustainable Development and the Sea (MEEDDM) but the fundings come from this Ministry, the National Research Agency (ANR), a funding agency named OSEO or from other sources in rare cases (like regions for example). This money goes mainly to the public RTOs but the organization seems a bit unclear and overlaps may occur between the work of two RTOs.

The budget is quite stable with approximately 200 million euros spent annually on automotive R&D activities and almost one billion euros which are either ready to be spent in the next years or where no specific year could be attached to the funding. The funding allows to develop all the technology categories defined for the EAGAR project. But two main strengths have been identified on the Fuel Efficiency & GHG emission as well as on the Competitiveness activities. One can observe the synergy between these funding and the targets and objectives France has set for its future and putting the main focus on GHG emission and to support its domestic automotive industry.

In terms of technology this is no surprise if the advanced IC engine activities receive a good support from public funds due to the decision of French carmakers to continue the development of IC engines but in parallel hybridation and batteries begin to gain more and more support and thus money.

4 References

MEEDDM, Facteur 4 – Reduction by a factor of 4 of the GHG emissions in France by 2050, 2006

MM. Claude Birraux et Christian Bataille, National Energy Research Strategy, French Senate, 2009

Law n°2005-781, National Energy Strategy, 2005

Etats Generaux de la Sécurité

French Car Makers Association, French Automotive Industry – Edition 2008, 2008

European Commission , Directorate-General for Energy and Transport, EU energy and transport in figures - Statistical Pocketbook 2009, 2009

MEEDDM, Climate Plan 2004, 2004

Grenelle de l'environnement

5 Annex

Overall programme initiative name	Programme call name	Programme call description	Funding organisation	Programme call end date
National Action Plan for Hydrogen	PAN-H	National action plan on hydrogen and fuel cells with specific projects on fuel cells for future vehicles.	ANR	
Battle for electric car		This is a government initiative to help launch the EV in France by financing a fleet of cars, the buy of charging infrastructures to reach a market by 2020.	Strategic Investment Fund	
Automobile Pact		The Automobile pact is a recovery plan aiming at helping the automotive industry by giving funds to recover from the economic crisis. On of these helps is given as loans to carmakers which will develop hybrid powertrains and batteries.	ANR, ADEME	
ADEME's own programme for clean transports	PP 1 Clean and efficient transports	Apart from its funding activities, ADEME operates a R&D programme on its own,	ADEME	30/12/2010
ADEME Demo Fund		This programme helps to demonstrate concepts for transport, energies and residential technologies. Administrated by ADEME, the demonstrator allows to make and validate technologies in order to optimize and validate their feasibility.	ADEME, ANR, OSEO	
Competitiveness cluster	System@tic	<p>The SYSTEM@TIC PARIS-REGION Cluster has developed 141 R&D projects, an total investment of €720M, which including €276,1M funded by the French Government, the economic development agencies (the National Research Agency and the OSEO) and the PARIS-REGION local governments.</p> <p>These projects are being developed within the 5 technology/market-oriented Working Groups:</p> <ul style="list-style-type: none"> * Automotive & Transport * Free & Open Source Software * Security & Defence * Systems Design & Development Tools * Telecoms <p>The SYSTEM@TIC PARIS-REGION R&D projects have to meet the following criteria :</p> <ul style="list-style-type: none"> * Cooperation between academics and enterprises pooling resources together * To bring innovation to one of the Cluster's target markets * To be submitted to the SYSTEM@TIC PARIS-REGION's in-house approval process before being presented to government officials for selection 	ANR, OSEO, Paris-region government, FUI	

EAGAR – Publicly funded automotive research in France

Competitiveness cluster Automobile Haut de gamme	iD4Car	Competitiveness cluster focused on supporting automotive R&D especially for SME.	ANR	
Competitiveness cluster	MOV'EO	This competitiveness cluster is now partnering with MTA for the evolution of mobility and transport technologies	ANR, FUI, OSEO, Local regions	
Competitiveness cluster "Mobilité et transports avancés"	MTA	Located in west France in the Poitou-Charentes district, the "MTA, Mobility and Advanced Transport" innovative cluster specializes in hybrid and electric vehicles. The cluster members have a strategy focused on 3 separate objectives: To position itself as one of the leading European clusters for research and development, experiments and qualification in 4 strategic areas To be a site for partnership in research and experiments on electric and hybrid vehicles To be a center for creating and distributing wealth and jobs for the Vienne department and the Poitou-Charentes region as a whole.	ANR, FUI	
Competitiveness cluster Lyon Urban Truck & Bus	LUTB 2015	Lyon Urban Truck & Bus 2015, founded by Renault Trucks, Irisbus, the French Petroleum Institute (IFP), the National Institute for Research into Transport and Associated Security (INRETS), the Lyon area and the Lyon Chamber of Commerce and Industry (CCIL) with key objectives: * To confirm the region, and France, as a leader in the field of industrial vehicles and secure, integrated transport solutions in urban areas. * To create a network of active participants from industry, research and training, working to serve the Heavy Goods Vehicles and bus sectors.	ANR, FUI OSEO	
Competitiveness cluster Véhicules du futur	Véhicules du futur	Situated in the Alsace and Franche-Comté regions, the Véhicule du Futur innovative cluster specializes in Automobiles, Transport and Mobility. The cluster's ambition is to become a global reference for its capacity to offer solutions for vehicles and mobility of the future on 3 key themes: * Clean Vehicle * Intelligent Networks and Vehicle * Excellence of Companies These themes come in 7 programmes: Fuel cell and engine environment, Comfort and safety in the cabin, Innovative vehicle, Mobility services and systems, Design process, Material and Processes, PerfoEST industrial excellence.	ANR, FUI OSEO	
PREDIT3	PREDIT3	PREDIT is a programme of research, experimentation and innovation in land transport,	MEEDDM, ADEME, OSEO,	01/12/2007

EAGAR – Publicly funded automotive research in France

		<p>started and implemented by the Ministries in charge of research, transport, environment and industry, the ADEME (French environment and Energy Management agency) and the ANVAR (now Oséo, a support agency)</p> <p>PREDIT 3 (2002-2006) was officially launched on 19th March 2002, after a draft agreement was signed by the four ministers and two agency directors who promoted the programme. PREDIT 3 will be marked by a specific effort put on goods transportation and energy and environment issues, greenhouse effect in particular, as well as a diversified research on safety. This third programme has been given about 300 million Euros in public funds.</p>	<p>Ministry of Transportation, Ministry of Research, Ministry of Industry</p>	
PREDIT4	PREDIT 4	<p>PREDIT is a programme of research, experimentation and innovation in land transport, started and implemented by the Ministries in charge of research, transport, environment and industry, the ADEME (French environment and Energy Management agency) and the ANVAR (now Oséo, a support agency)</p>	<p>MEEDDM, ADEME, OSEO, Ministry of Transportation, Ministry of Research, Ministry of Industry</p>	01/12/2012
Carnot network		<p>A network of 13 000 researchers with common goal : developing partnership research with companies.</p> <p>The Carnot institutes network offers:</p> <ul style="list-style-type: none"> - an easier access to the network competencies whatever the entry point is, - good listening and quality levels, - a professionalized management of partnership research. <p>The Carnot network invests in competencies that help meeting the top of competitiveness and society challenges of the first half of the 21st century.</p> <p>FITTING THE GREAT ECONOMICAL AND SOCIAL CHALLENGES ...</p> <ul style="list-style-type: none"> * Transport, mobility * Renewable energies * Health care and one to one assistance * Home land security * Information and Communication Technologies * Space <p>... THROUGH 6 KEY COMPETENCY AREAS</p> <ul style="list-style-type: none"> * ICT – micro & nano technologies * Materials, mechanics and Processes * Environment and energy, propulsion, chemistry * Earth sciences and natural technologies * Life sciences & health technologies * Building and land use planning <p>The Carnot network is one of t</p>	<p>ANR</p>	

EAGAR – Publicly funded automotive research in France

INRETS		<p>The French National Institute for Transport and Safety Research has been created by interministerial decree on September 18, 1985. INRETS is a state-financed scientific and technological body under the administrative supervision of the Ministries in charge of Research and Transport.</p> <p>Axes and scientific domains</p> <ul style="list-style-type: none"> * Axis I - Improve people safety * Axis II - Optimize the use of transport networks and reduce the dependency to oil: from mobility to land planning * Axis III - Increase reliability and sustainability of transport systems, optimize energy consumption and reduce the impact on the environment <p>Organization</p> <p>INRETS is administered by a board of directors composed of nine representatives of the transport professions (manufacturers and operators), eight representatives of the ministries concerned, and four representatives of INRETS personnel.</p>	MESR	
IFP	Programme n° 8 : programme 188 « Recherche dans le domaine de l'énergie »	<p>IFP is a public-sector research and training center, aimed at developing the technologies and materials of the future in fields of energy, transport and the environment. It provides public players and industry with innovative solutions for a smooth transition to the energies and materials of tomorrow – more efficient, more economical, cleaner and sustainable.</p> <p>IFP fosters knowledge transfer between long-term fundamental research, applied research and industrial development in keeping with the recommendations of the Barcelona European Council held in March 2002. It is funded both by a State budget and by resources provided by private French and foreign international partners.</p>	MESR, under the authority of MEEDDM	
INRIA			MESR	
INSERR		<p>INSERR is a national organisation specifically dedicated to the problems of road safety. It is made up of the State (Interministerial delegation for road safety and 7 ministries), professional organisations, territorial communities, University Institutions and Research, The main mission of INSERR is to define the safety rules and to train the main players of the road safety institutions in France.</p>		

EAGAR – Publicly funded automotive research in France

CNRS	Programme n° 3 : programme 194 « Recherches scientifiques et technologiques pluridisciplinaires »	Inside CNRS, the Coria laboratory works on combustion phenomenon LASMEA laboratory work on intelligent vehicles as well as HEUDIASYC* in Compiègne and LAMIH in Valenciennes	MESR	
CEA	Programme n° 8 : programme 188 « Recherche dans le domaine de l'énergie »	<p>The CEA is the French Atomic Energy Commission (Commissariat à l'énergie atomique). It is a public body established in October 1945 by General de Gaulle. A leader in research, development and innovation, the CEA mission statement has two main objectives : To become the leading technological research organization in Europe and to ensure that the nuclear deterrent remains effective in the future.</p> <p>The CEA is active in three main fields : Energy, information and health technologies, and defense and national security. In each of these fields, the CEA maintains a cross-disciplinary culture of engineers and researchers, building on the synergies between fundamental and technological research.</p> <p>The CEA Liten laboratory conducts research activities about batteries and fuel cells and all kind of topics related to transportation.</p>	MESR, MINEFI	
EUREKA	EI2944 - FACTORY RINGING	Innovations In Ring Rolling Process Design, Optimisation And Control	EUREKA	04/10/2007
EUREKA	EI3796 - SYSTEMO	System Proof Extended Objective	EUREKA	09/03/2010
EUREKA	EI3734 - I-STARS	Integrated Starter Alternator Reversible System	EUREKA	02/01/2010
EUREKA	EI3698 - FONDAL	New Foundry Aluminium Alloys	EUREKA	01/01/2010
EUREKA	EI3697 - KB I ELECTRIC-HYBRID	Kb I Electric-Hybrid	EUREKA	01/05/2006