

27th summer workshop of planning and urban design

The River, a Potential for the Future of the Area at the Confluence of the Seine and the Oise Rivers

From 22nd August to 19th September 2009 in Cergy-Pontoise (Paris).











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Les Ateliers de Maîtrise d'oeuvre urbaine - Forum d'initiatives urbaines - Le Verger - rue de la Gare - BP 90047 - CERGY-PONTOISE Cedex

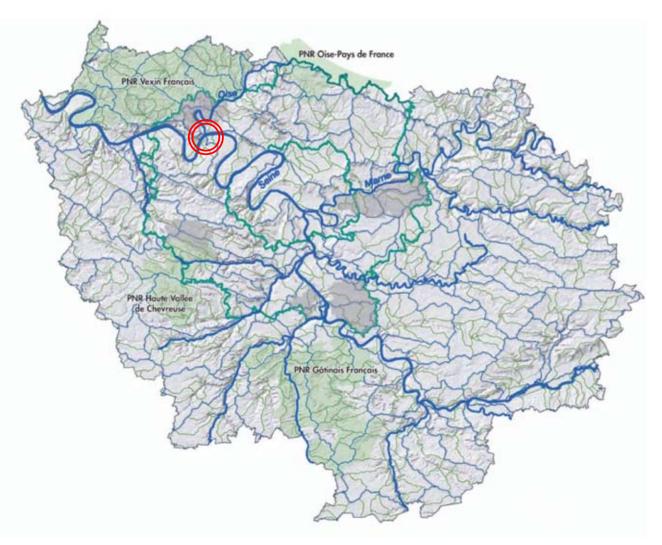
The Regional Council of the Ile-de-France Region, a structural partner of the Workshops, suggested the topic of the river on the Francilien\* area for the 27th session of the International Workshops on Urban Design and Town Planning.

Several studies on the topic of the river and its tributaries have been carried out and all of them point out the importance of the issues at stake and the need to place the river at the heart of development strategy. Several large French and European riverside cities have launched projects in order to reclaim former areas of river port activities and thus to enhance the unique potential afforded by the river. The river as a medium for development has revived the issue of urban and environmental enhancement at the municipal level. The river is indeed a key thread for numerous projects such as the Rives de Loire programme in Nantes and the Plan Garonne in Bordeaux. Here we will look at the river beyond its own antagonisms. This is why the issue and the comprehension of the risks - prevention and development - must now be at the very heart of the development strategy for rivers and their surroundings.

The river brings us face to face with the geography as well as with the history of an area. If we take this into consideration then we can bring together cross-disciplinary thematic strategies and suggest three different work scales:

- the micro-scale: the scale of riverbanks and their new uses.
- the mesoscale: the scale of development, urbanization, the living environment.
- the macro-scale: the scale of the metropolitan area, the francilien area (around Paris), of waterways and of the economic and environmental issues at stake.

When the Workshops suggest studying a way of reconciling the river and the city the intention is to over-



IAURIF MAP, 700 «basic» catchment areas in the Ile-de-France



Confluence Seine-Oise

come a unilateral form of reasoning that demands exclusive uses. The river territory conceals unknown resources. Could it be that extraordinary elements can help develop an ordinary city?

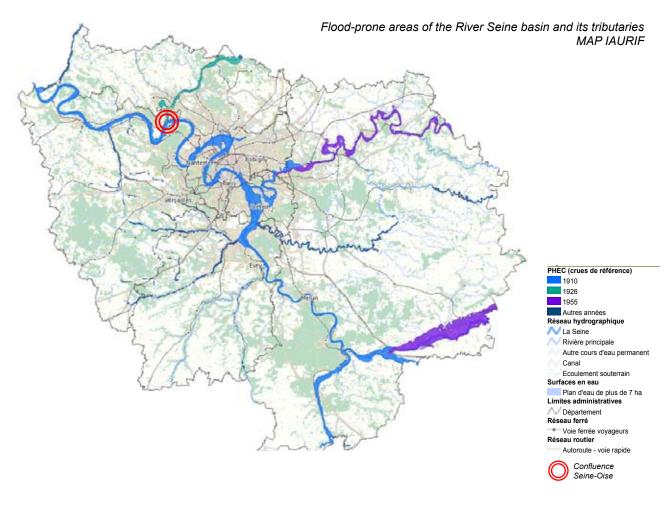
Economic and environmental issues have considerable effect on the present and this lead to official commitments and objectives. In this regard, a riverside city and all the ensuing activities are sure to contribute significantly to a general improvement of the area provided that all parties unite their efforts.

Renewed interest in inland navigation also implies a "democratization" of the river, the river banks, and water-related leisure activities. Port activities are essential for the sustainable development of the Ile-de-France Region. The alteration of the river territory must be achieved through reappropriation as well as through many different uses. Future strategy will not advocate the relocation of some activities that are not considered desirable. but will instead anticipate and endeavour to integrate them wherever they may be.

On the other hand, when it comes to the future of the river, it is not enough to anticipate. Prevention for the sake of better development is an essential principle in the fight against fragility due to risks of flooding, high floods and other major risks. The protection of natural embankment areas and a development strategy aimed at reducing the risks are very important tools for protecting housing in the adjoining countryside.

The issue of risks in already built-up areas is tackled in the Flood Prevention Plan (PPRI) and must be constantly present in the studies carried out by the Workshops.

Delphine Baldé. architect urban designer, scientific manager.



Pastoral leisure vs economic use of rivers and waterways. Pictures Michel Derouault





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## The territories at the confluence of the rivers Seine / Oise, Seine-Aval and Oise

#### 1.1 Densities in the Francilien area

	inhabitants	surfaces	density
lle de France Region	11,5 millions	12011 km²	964 hab/km²
Val d'Oise Départ- ment	1.1 millions	1246 km²	887 hab/km²
Yvelines Départ- ment	1.4 millions	2284 km²	610 hab/km²
Cergy-Pon- toise Area	183 430	78 km²	2360 hab/km²
Seine Aval	365 000	400 km²	912 hab/km²

## 1.2 Risks of floods in the IDF (Ile de France Region)

4.7% of the Francilien area is affected 900,000 inhabitants in the area

Number of municipalities affected: 279 Surface area affected: 24,800 ha

## 1.3 Going with the flow (water-related information)

The Seine: 777 km / surface area of the river basin:

78,650 km<sup>2</sup> / average rate of flow: 563 m<sup>3</sup>/s

The Oise River, a tributary of the right bank of the Seine: 330 km / surface area of the river basin: 16,667 km<sup>2</sup> /

average rate of flow: 110 m<sup>3</sup>/s

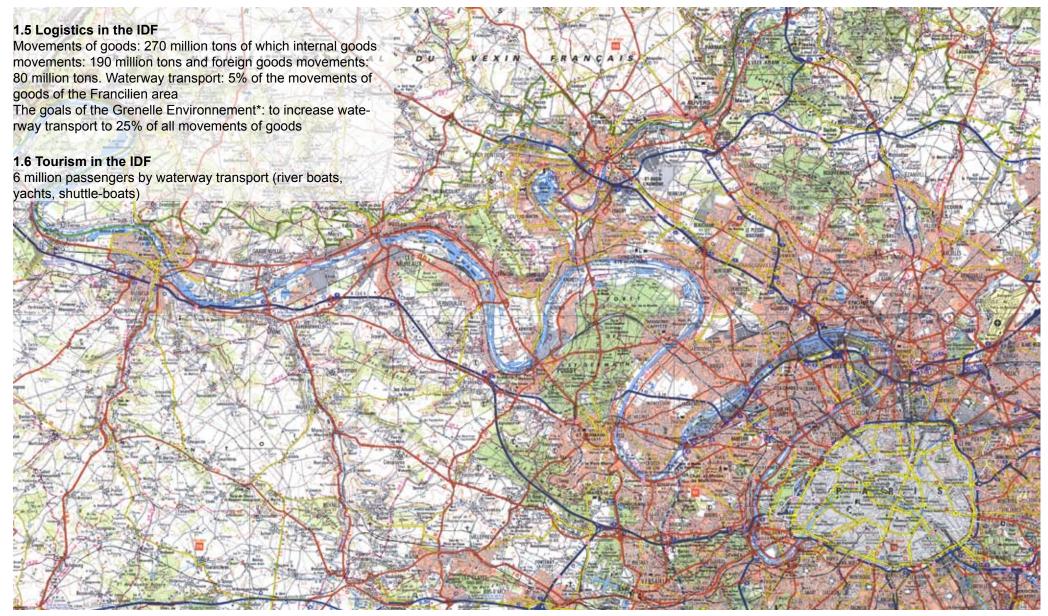
#### 1.4 Land use in the Ile-de-France

surface	urban zones	far- mlands	mea- dows	forests	wet zones
12011 km²	16,1%	60,4%	0,4%	22,4%	0,6%



Aerial view of the territories of the confluence of the Seine and the Oise





IGN Map (French National Geographic Institute) of the confluence and its surroundings between Paris, Cergy-Pontoise and Mantes

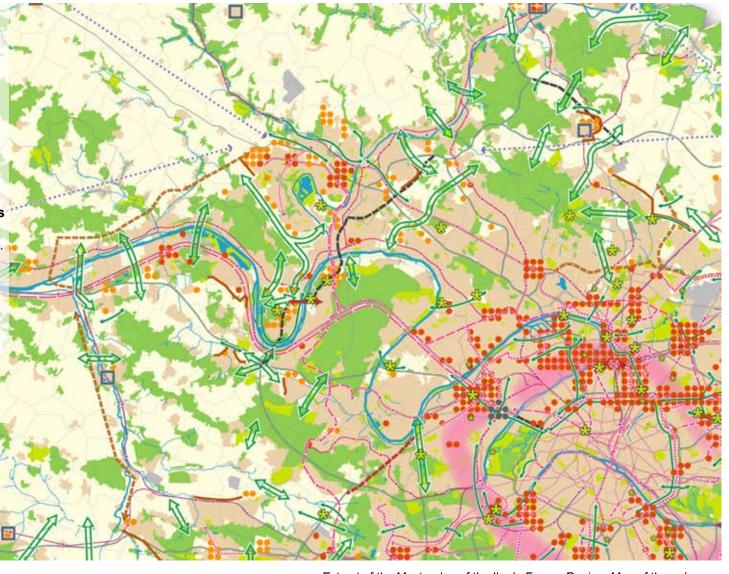
# A project with territorial importance and a territory designated for projects

2.1 A territory under development: Infrastructure projects by the State / the Region / the Département

## Railway projects

- Development project of a TGV (highspeed-train) line between Paris and Normandy with a station at Conflans fin d'Oise.
- Extension of the RER (Regional Express Railway) Eole from the Haussmann Saint Lazare station towards La Défense, Nanterre and the Seine.
- Public transport railway project for a tangent line to the west. The route of the western tangent line is about 25km long and will mainly use the existing infrastructure of the outer circle that will be either reshaped or modernized.





Extract of the Masterplan of the Ile de France Region Map of the enhancement project of various parts of the area

#### Projects involving navigation facilities and port infrastructure

- Project by the VNF (Voies Navigables de France = French Navigable Waterways Authority): The Seine-Nord Europe Canal. Construction of a European high capacity water transportation system connecting the Seine River basin to the Escaut and Rhine Rivers. The total length of a completely new canal between Compiègne (Oise) and Aubencheul-au-bac (Picardie) is 106km.
- Autonomous Port project: expansion of the port of Limay, construction of a port in the town of Triel, possible development of new port facilities in Achères and of a multimodal turel Régional du Vexin transport centre.

## Road and motorway projects

- The road project finishing up the A104 (the outermost of the 3 Paris ring roads known as the Francilienne,

the first one being the périphérique (first ring road) and the second the A86 motorway also called Paris super-périphérique)

- The project to connect the C13 E13 roads (a connection between Seine-Aval - Cergy-Pontoise - Versailles)
- The project for a bridge between Achères and Carrières in order to serve the loop of Chanteloup
  - The project for a **bridge** between Meulan and les Mureaux.

## 2.2 Seine-Aval, a Project of National Interest managed by the **EPAMSA** (contracting authority for Seine-Aval)

51 Municipalities 365,000 inhabitants over 40,000 ha almost 50% individual housing 32% social housing on the territory (with a peak of 40% in Poissy and 64% in Chanteloup)



## River-based topics in a sustainable development approach

The sustainable development approach is clearly relevant to the consideration of river-based topics given the importance of the greenhouse effect and must therefore be included in all the topics mentioned below.

## 3.1 Towards a diversity of functions and uses

The river and the flood plain can have many different, sometimes conflicting, uses. The relations between the various uses must therefore be examined. Are these in contradiction, opposition or synergy?

How can we make the various uses complementary?

- Ecological corridor / development of river transport
- Urban densification / fight against floods
- Transport infrastructure / physical and ecological continuities

What new uses can be provided by the river territory? And what instruments are needed in order to help make the river a 'river street' and an area accessible to all?

Throughout its history, the river and its surroundings have been the site of industrial activities that must now be thoroughly altered. This will make large plots of land available for innovative uses of the river. If the river becomes the essential constituent of the development project, it must be at the heart of diversified and innovative planning. We must therefore raise the question: what possibilities are there for the various modes of river transport? River transport for the conveyance of passengers is actually guite limited and we must make sure that every project is coherent with the others.



Cycle lanes along the river

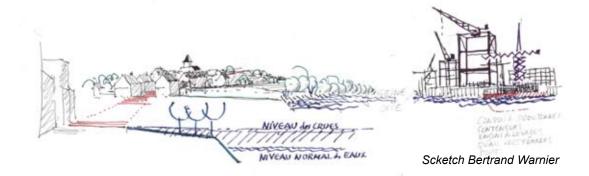




Types of dwellings by the water in the Netherlands



Shuttle-boats, an alternative waterway transport



## 3.2 Building with the risks

The very first question that arises when we think of the river's potential concerns the nature of development in flood prone areas?

How to control the "lively" nature of the river and the natural phenomena in order to live in an exceptional environment?

How can the Flood Prevention Plan serve on affected areas with regard to prevention and development?

Fragility is not only a synonym of damage but must be also studied in terms of ecological resilience and resistance. The capacity for resilience and resistance depends on socio-economic characteristics as well as on experiences (personal experience of floods), the involvement of public authorities (information regarding prevention, emergency organization, protection measures, etc.) and of course the ways in which waterways are managed (anticipation of floods, upriver flood retention basins, etc.).

## 3.3 What new identities could be promoted?

The river is indeed unquestionably an asset serving to meet the wishes of the inhabitants of the Francilien region for a better balance between town and nature.

The true heritage value of the river as a means of shaping the identity of a territory is currently under-promoted. The river and its tributaries have greatly influenced the development of built-up areas and are completely integrated into the landscape (hillsides, plateaux, valleys) and the development history of the area. Here, things must be considered on a larger scale.

Other elements are present and punctuate the landscape, such as locks and water treatment plants. All local specificities of the heritage must be joined in order to develop an enhancement project.



Spillway towards wetland



Catchment behind a levee



The river banks of the Seine and houseboats Picture Marie Aimée Bariety

## 3.4 The pleasure of water

The enhancement of water in the city leads to a rediscovery of the river on a regional as well as a global scale. Neighbouring residents will look at the living environment in a different way and will be sensitive to the quality of the water.

If the quantitative elements are necessarily part of the study because of the flooding issue, the qualitative ones should not be ignored either (quality of the water and of the aquatic environment).

### What kind of privileged relationship can there be between the river banks and the water?

What kind of urban atmospheres can be generated in the vicinity of the river (sounds, lights, views)? How to develop large scale river-based tourism?

### 3.5 River economics

In order to confirm the economic orientation of the river. innovative projects must be carried out (eco-industries. eco-building) and existing industries must be preserved while enhancing the whole river corridor.

The enhancement potential of ecological continuities of the river must be studied on both a large and a local scale. Local undertakings can begin to set up a biological corridor with its various aspects. The continuation of logistics activities and the development of river transport should be no obstacle to the mapping of the natural spaces that will be part of the biological corridor but will help release strategic areas and strips of public spaces.

The territory along the river can no longer be a forbidden area, privatized by monofunctional sites.

On the other hand, new priorities for the river do include logistics within the urban system.







The pleasures of water



The river banks of Bonneuil. Picture syndicat Marne Vive



Port of Limay. Picture Autonomous Port



Port of Rotterdam



Aerial view of the port of Rotterdam

What opportunities does the river offer for economic development? How to promote the potential of intermodal transport facilities?

## 3.6 Mutual impact of natural and technical infrastructures

The Seine and the Oise rivers as well as the flood plains can be seen as one large natural infrastructure. However, besides the natural infrastructure there are now numerous technical infrastructures:

- An hydraulic system for local sewage, most of which is underground (and a smaller part in the open air) for run-off water as well as wastewater: the Achères water treatment plant and sewage farms that are meant to treat the sewage from most of the wastewater from Paris.
- Transport networks and especially the railway network, which has played an essential role in the urban history of the area.
- The ports and the harbour basins, docks, consolidated river banks, etc.
- Quarrying areas (borrow pits and sand pits) that are now more or less wasteland.

These two aspects of environmental and town and country planning are usually seen as contradictory - if not openly in conflict - and are therefore approached as such in development planning.

The antagonism must, however, be left definitely aside, to be replaced by a truly integrative approach based on an interactive knowledge and a consideration of natural and social processes while working out development strategies.

To put it in more practical terms, this means that in the transitional area between the town and the country, urbanization should not freeze or standardize the morphology of the spaces formed by the river but, on the contrary,

should perceive them as part of a global ecosystem with organic dynamics.

Water-related issues are not limited to flood risks. If hydraulic and hydrological processes are included, this can help develop a green-and-blue grid and allow for the design of a more comprehensive plan that includes the whole valley, from the river plain to the hillsides.

How can we bring together natural ecosystems and urban growth, or to put it in more practical terms, how can we build along a river using a sustainable development approach?

Answers might be found in areas of traditional riverside cultivation by studying the development of several modern Asian or American metropolises or the future development projects in the Netherlands intended to cope with the current rise in sea level.

Landscape-related infrastructure for an urban environment (Val de Bièvre). Extract of a document by Georges Fahrat.







The river Bièvre in Gentilly

## 3.7 Continuity / Disruption

## What is the easiest physical and visual access to the river? Where are the strategic points?

The various disruptions have a significant effect on the urbanization of the Seine valley. Still, they have to be considered in further planning: how, then, can we take the disruptions into account?

Is it possible to develop a city around a river, or do we have to opt for a more scattered urbanization? The continuity / disruption dyad refers back to natural or technical infrastructures. They create large-scale continuity lengthwise: the river Seine between Paris and Mantes, the A104 motorway (the Francilienne) completed between Ceray and Saint Quentin. But the infrastructures are at the same time a force of transverse local disruption; as there is no bridge here, the Seine does indeed constitute a disruption between the two river banks, with all the bridges and connecting infrastructure dividing up the environment.

#### The main questions:

- How to deal with existing infrastructures and how to organize easy access to the river?
- How to imagine open spaces and planted areas in terms of ecological continuities? Should they be seen as disruptions in a built-up environment or are they instead connecting elements? Should there be "voids" just like the voids we see on a land surveyor's map or should we encourage continuous urbanisation?
- Can we improve the management of rainwater that is often in contradiction with the natural water cycle, in order to make it part of the new anthroposystem?
- Is it still possible to deal separately with natural continuities and urban continuities? Wouldn't it be better to consider them to be complementary and indivisible elements of a global system?





The footbridge at the leisure area of Cergy - Dani Karavan - Basic Landscape designs



The ruins of the bridge of Poissy



Fronts of Paris buildings along the



The Footbridge connecting the Tuileries and the Orsay Museum

## 3.8 From a large-scale landscape to the river bank

The river, the catchment areas, the tributaries and the expansion zones constitute a geographical system (both topographic and geological) that strongly shapes the infrastructure facilities and built-up areas.

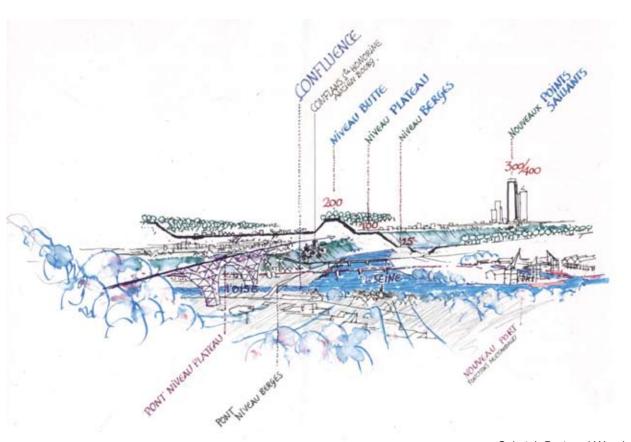
The relief imposes urban shapes, strategic points and road infrastructures in the valleys, and consequently affects the relationship between the river, the plateaux, the hillsides and even the views.

### What role can the large-scale landscape of the lle-de-France play in a project with territorial significance between Paris and the sea?

What are the specificities of the confluence and what about the orthogonal encounter between the two valleys? As for the river banks, they are areas of interface between the city and the river and therefore at the heart of a project on confluence.

The enhancement of the river banks raises various questions regarding:

- advocated uses
- chosen development techniques
- the arrangement between the longitudinal and transverse dimensions (urban continuity)



Scketch Bertrand Warnier



Delphine Baldé Pictures

## The enhancement of the river territory in municipal schemes: several shared experiences

### 4.1 The Rives de Loire project

For the past 10 years, the Nantes District - now called Nantes Métropole - together with several municipalities and the AURAN (French urban planning public agency for the Nantes Region) has launched a comprehensive enhancement project for the Loire river banks. The project is closely connected to another important one for the urban renewal of the Island of Nantes, the aim of which is to give the river once again a major role in the city. The Rives de Loire project is based upon a common wish on the part of the surrounding municipalities to develop the land in the immediate vicinity of the river: the objective is to connect existing development projects in order to work out the reappropriation of the river and give the area a new impulse.

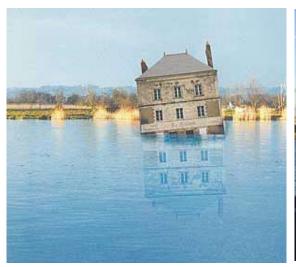
#### 4.2 The Plan Garonne in Bordeaux

In 1997, the Urban Community of Bordeaux asked the A'urba public urban planning agency to work out an orientation plan, which resulted in a programme called "Plan Garonne" that was adopted in 2000. The various measures of the programme, with an 11 million Euro budget, are included in the Master Plan 2000-2006 and meet three objectives:

- to have a direct and functional relationship to the river
- to encourage people to rediscover and reclaim the river
- to enhance the river and the surrounding natural spaces.

## 4.3 The Plan Bleu in Lyon

The goal of the Plan Bleu is to further encourage and consolidate the rediscovery of the river banks following a policy of river bank enhancement. The Urban Community of Lyons has worked out a development plan for the river banks of the Saône and the Rhône rivers as a reference document. This document will serve as a prospective and incentive tool. The Plan Bleu is meant to play a major role in linking local and intermunicipal initiatives that adhere to the management guidelines chosen by the various municipalities.



of the River Loire in Nantes



Jean-Luc Courcoult's artistic setting on the Estuary The island of Nantes, urban development project by Alexandre Chemetoff Landscape architect



Project for the guays of the River Garonne in Bordeaux Michel Corajoud Landscape designer



The miroir des Quais. Place de la Bourse in Bordeaux



Terraces along the river banks of the Saône



Playground on the banks of the Rhône

#### 5.1 Application conditions

- to be a student at **Master's level** or a young recently graduated professional (average age between 22 and 30)
- Training related to Urban Design and Town Planning: engineer, architect, artist, landscaper, urban planner, economist, environmentalist, geographer.
- proficiency in the English language

#### 5.2 Selection

The candidates are requested to prepare a **research** report and selection will take place on the basis of these reports: the research reports can be done individually or in a team of two. Content: a study of the Workshops' topic, applied to an area of your choice.

4 to 8 pages of A3 paper size (297mmx420mm)

#### 5.3 Application form

- Application form duly filled out,
- Curriculum Vitae of the candidate
- Research report

## 5.4 Deadline for submitting the application form

Completed applications are to be sent to Nicolas Détrie before May 1st, 2009. nicolas.detrie@ateliers.org

The results of the selection will be given on May 20th, 2009.

## 5.5 Financial participation

Travelling expenses must be borne by the participants. The participants are also requested to take out personal insurance.

1st option - MEALS NOT INCLUDED 350€ This option comprises: accommodation in a hall of residence, visits, conferences, pedagogical support, registration at the university of Cergy-Pontoise.

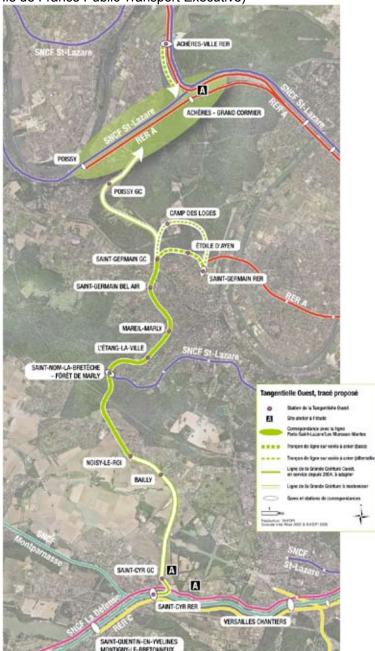
2d option - MEALS INCLUDED 700€ This option comprises: 1st option + meal vouchers

#### **5.6 AWARDS AND DEGREES**

Each participant will obtain a degree called "International Workshops of Cergy-Pontoise" by the Department of Geography of the University of Cergy-Pontoise. It corresponds to a degree of 4 years of higher education and validates 12 ECTS (European Credit Transfer System). An amount of 6,500€ will be divided among the participants after the deliberation of the jury.



6.2 Project of a tangent railway line to the west (Document STIF Syndicat des Transports d'Ile de France = lle de France Public Transport Executive)



#### **6.3 Route of the Seine-Nord Europe Canal** (document: French Navigable Waterways Authority)



#### 6.4 Goals of the Flood Prevention Plan

PPRI (plan de prévention des risques inondations) : Flood Prevention Plan In order to limit the consequences of the risks in built-up areas, the Prefect of a Département can use the Flood Prevention Plan. The aim is to prevent and mitigate the consequences of heavy floods.

Another aim of the Flood Prevention Plan is to work out guidelines for land use and the erection of buildings.

The authorities in charge of the Plan can also develop strategies and suggestions concerning existing buildings. They can also place restrictions on public utilities that are to be included in the official Land Use Plan, which has to be respected for all types of constructions.

#### Notes

- \*Francilienne: Paris metropolitan area. Also the outermost of the 3 Paris ring roads (A104)
- \* Département: French territorial entity
- \*The Grenelle de l'environnement is an open multi-party debate in France that reunites representatives of national and local government and organizations. The aim is to define the key points of public policy on ecological and sustainable development issues for the coming five years.



## 6.5 PRESENTATION

les ateliers is a non-governmental organization that gathers universities, decision makers and professionals dedicated to planning, development and urban design.

Since 1982, les ateliers has been organizing international workshops on topics defined together with local authorities for city or regional planning. The method consists in gathering students or professionals of different nationalities and different specializations (landscape designers, architects, engineers, economists...), and make them work in different teams that finally present their proposals to an international jury composed of local authorities and international experts.

Each workshop offers to local authorities new and innovative urban development proposals, assessed by the members of the jury and transcribed into a synthesis delivered 2 months after the workshop. These workshops are also a source of training for all the participants, whether they be local or international experts.

At the beginning, les ateliers focused on planning issues for the Paris Ile de France Region. Then, they developed a very high knowledge in Asia (we held 10 workshops there: Tokyo, Doi Tung, Canton, Shanghai, Ho Chi Minh, An Giang, Can Gio, Phnom Penh, Bangkok) and recently diversified their fruitful work combining workshops along the Mediterranean Sea (Casablanca, Marseille and Alexandria of Egypt) and in Africa and South America (Benin, Senegal and Brasil).

#### RECENT EXPERIENCE

Bangkok - Thailand	Bangkok River City
Cergy-Pontoise- France	Great infrastructures in an urban environment
Paris Airports - France	Towards an AEROPOLIS?
An Giang - Vietnam	Urban Development in the Mekong Delta
Marseille - France	Development of the Harbor Area (160 Ha)
North Paris - France	Urban Renewal, densification and metropolitan integration
Casablanca - Morocco	Urban Projects for the Innercity Former Airport (450 ha)
Can Gio - Vietnam	A New Ecological City
Saclay - France	Metropolitan territory of high scientific competitiveness
Porto Novo - Benin	Identity and Development of an African Capital City
Cergy-Pontoise- France	Polycentrality in metropolitan space
Seine&Marne - France	The river's confluence: A new gate for Paris.
Cergy-Pontoise- France	From the "new town" to the city: images and ambitions
Le Bourget - France	Sustainable effects of short-lived events: the 2004 technology fair
Pontoise - France	The city center of Pontoise
	Cergy-Pontoise- France Paris Airports - France An Giang - Vietnam Marseille - France North Paris - France Casablanca - Morocco Can Gio - Vietnam Saclay - France Porto Novo - Benin Cergy-Pontoise- France Seine&Marne - France Cergy-Pontoise- France Le Bourget - France