



PPRT

# Technological risk prevention plan (PPRT)

Acting together  
to control risks



# Technological risk prevention plan

## Managing land-use planning (LUP) through dialogue

The technological risk prevention plan (PPRT) is a new tool for managing land-use planning in the vicinity of industrial establishments. Established in France by the 2003 so called 'risk law', the PPRT applies to all establishments classified as SEVESO AS<sup>1</sup>.



### Some useful vocabulary to know it all

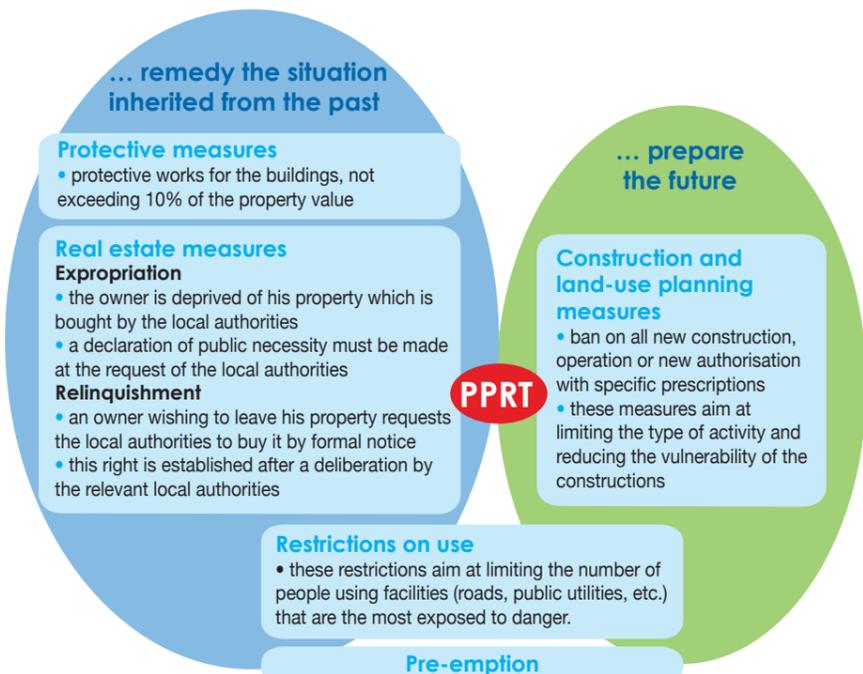
**"Aléa"**  
Probability that a dangerous phenomenon creates effects of a given intensity, and over a determined period of time at a given point of the territory. (French word, untranslated because of its specificity).

**Effects**  
These are the three possible effects of a dangerous phenomenon: toxic (gas), thermal (fire) and overpressure (explosion). They are evaluated according to four thresholds with increasing intensity: indirect, irreversible (SEI), lethal (SEL) and significantly lethal (SELS).

**Stakes**  
These depend on the level of infrastructure present in the region: dwellings and commercial properties, public buildings (ERP), transport infrastructures, outdoor public spaces, public utilities (electricity and gas supply terminals, telecoms aerials etc.). The presence of inhabitants and employees in the zone of study is taken into consideration.

The aim of the PPRT is to protect the population. It is a tool which, beyond the industrial establishments themselves, works to reduce risk at source, as identified in the safety report. The PPRT sets out to define – through dialogue with relevant parties – regulations for land use which are compatible with the classified installation's activity, local development projects and the interests of local residents.

### Measures adapted to...



### Well-defined zones and areas

The PPRT consists in assessing and prioritising the risk level associated with the activity of the classified installation on the impacted territory. These levels enable the definition of zones, each having its own land-use planning and construction rules. For the highest levels, areas for possible expropriation and/or relinquishment may also be suggested by the PPRT (see below).

Regulated zones	Future land-use planning and construction measures	Possible real-estate measures
Dark red	Ban on new construction	Expropriation Relinquishment
Light red	Ban on new construction but possibility to extend existing industrial buildings if they are protected	Relinquishment
Dark blue	New construction possible depending on limitations on use or protection measures	
Light blue	New construction possible depending on minor limitations	

### Financed measures

The financing of real estate measures (expropriation and relinquishment) is subject to an agreement between the local authorities, the state and the operator. Construction measures are on the property's owner charge, but can be financed up to 10% of the property value thanks to a tax credit (e.g. anti-splinter films on windows).

### Role of dialogue and partnership

To be accepted by everyone and show its long-term commitment, the PPRT brings many associated persons together (see diagram opposite). The Prefect initiates and runs the project. Under the Prefect's authority, the classified installations inspection body (DRIRE or STIIC) and the Departmental Directorate for Public Works (DDE), organise the debate. The PPRT also relies on partnership (operational working group made up of associated persons) and consultation (public meetings, poster campaigns, etc.). The Local Information and Dialogue Committee (CLIC), which is both a partner and an example of dialogue, plays an important role in the elaboration of the PPRT.

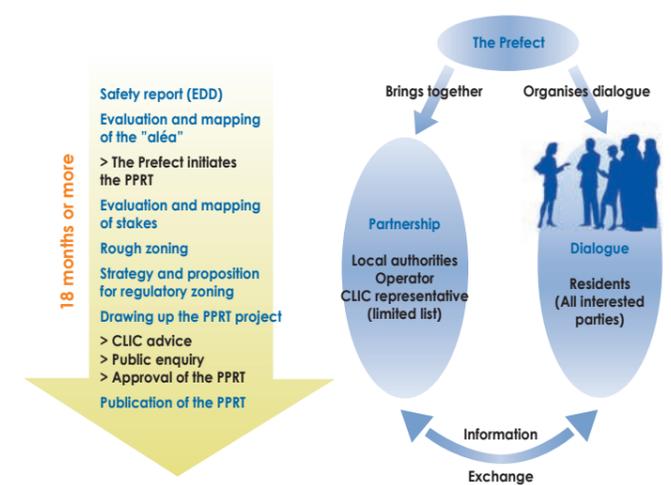
## The PPRT in practice

The launch of the PPRT procedure starts with the first meeting of the CLIC. This meeting aims at describing the establishments which are the source of the risk and to set out the objectives of the PPRT.

### First step: mapping of the 'aléa'...

The safety report supplied by the operator lists all the possible dangerous phenomena, their probability and the forecast intensity of their effects. Once these data have been combined, the 'technological aléa' is calculated by the classified installations inspection body (DRIRE or STIIC) for each point of the territory and each type of effect.

### How the PPRT works



### Useful to know

#### PPRT and regulations

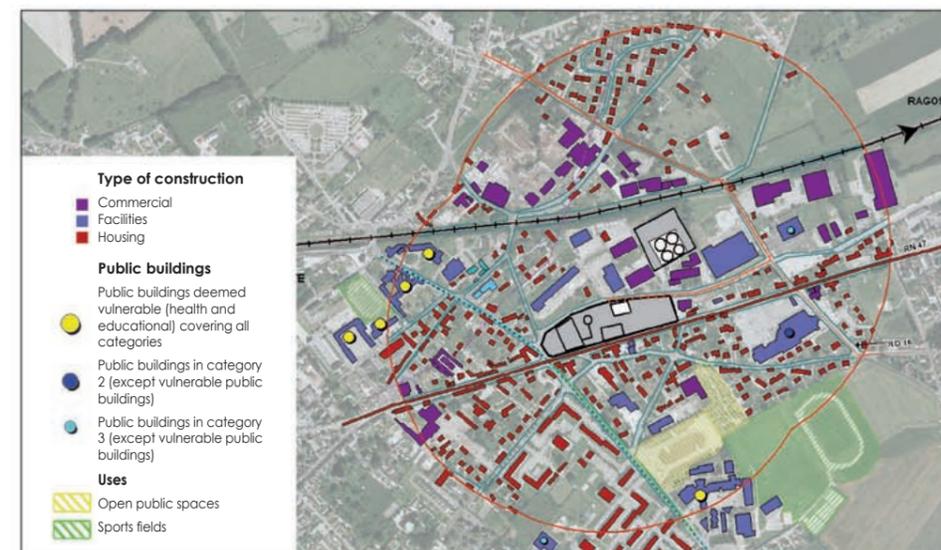
Feedback on eight pilot sites was used in drawing up the PPRT regulations and methodology:

- French Environment Code: Art. L.515-15 to L515-24
- PPRT decree of September 7, 2005
- Memo of October 3, 2005
- Guide méthodologique PPRT [PPRT methodology guide]. MEDD/MTETM 2006

#### map of the "aléa"



#### map of stakes



### Analysis of stakes

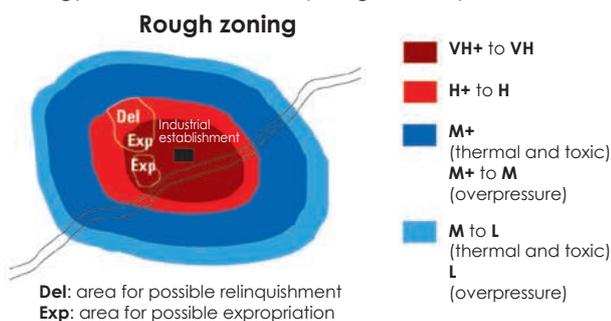
This involves listing stakes present on the territory (see opposite). This work is carried out by the DDE, in close collaboration with the relevant local authorities, their technical services and the various local partners.

1 - Around 600 establishments in France out of 500,000 classified installations. The top tier SEVESO scheme covers establishments considered as representing the highest danger. These establishments are subject to local authorities authorizations and necessitate a PPRT.  
2 - See L'étude de dangers. Un outil efficace de maîtrise des risques technologiques. [Safety report. An efficient technological risk management tool.] MEDD, 2006



## Development of the PPRT strategy

Cross-referencing "aléa" and stakes enables a preliminary risk map to be drawn up of zones and areas which may be subject to regulation (called rough area zoning map) and to begin possible supplementary investigations (evaluating at-risk properties, vulnerability assessment). These two elements are the basis of the PPRT strategy and constitute a key stage in the process.



The objective of this stage is two-fold:

- to introduce and explain the measures which are inevitable as well as possible options depending on the local context;
- to enter into an exchange with the parties involved in order to set out the PPRT measures, taking account of the particular nature of the site, local development projects, financial constraints or additional safety measures advised by the operator.

The strategy stage is the time to evaluate the likely budget (between the operator, the state and the local authority), needed to establish areas of possible expropriation or relinquishment.

## PPRT project finalisation

This involves three key elements:

- the regulatory zoning map shows the zones and areas of the territory to be covered by the strategy;
- the PPRT regulations set out specific measures for each zone defined by the regulatory zoning map;
- the introductory memo explains and justifies the project's approach and leads to the choice of regulatory zoning map and regulations.

## PPRT approval

The PPRT project is distributed to project partners and then to all residents as part of a public enquiry. If necessary, changes are made to the project in order to incorporate suggestions made. The PPRT is then approved by a Prefect's decree.

## Implementation of real-estate measures

Once the PPRT is approved, a three-way financial agreement must firstly be signed in order to implement identified real-estate measures in the areas of possible expropriation or relinquishment. It is then up to local authorities to initiate the relevant procedures.



## The Local Information and Dialogue Committee

**An example of dialogue, the CLIC – set up by a Prefect's decree – represents the entire territory concerned by the existence of a top tier SEVESO establishment. The CLIC plays a central role in the PPRT.**

### Membership

There are at most 30 members, representing all parties involved, split into five groups: administration (Prefects, DRIRE, DDE, SDIS, etc.), local authorities, operators, local residents and employees. The CLIC pass on information to the general public.

### In the context of the PPRT

It is involved throughout the development process:

- it is convened by the Prefect who informs it of the launch of the PPRT process;
- it meets regularly in accordance with the conventions fixed by the Prefect's decree;
- it nominates a representative via whom it is a partner in the development of the PPRT;
- it arranges how its representative carries out his/her task of enabling the committee to follow the stages of the PPRT;
- finally, it gives feedback on the PPRT project.

## Internet sites

### DDE

Departmental Directorates for Public Works  
Listed on the site of the Ministry for Transportation, Public Works, Tourism and the Sea (Ministère des Transports, de l'Équipement, du Tourisme et de la Mer)  
<http://www.equipement.gouv.fr>

### Prefectures

Listed on the Interior Ministry site  
<http://www.interieur.gouv.fr>

### DRIRE

Regional Directorates for Industry, Research and the Environment  
<http://www.drire.gouv.fr>

