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# **COST Action Urban Agriculture Europe:**

Strategies for the spacial relationship between the Parc Agrari del Baix Llobregat and its surrounding municipalities

Barcelona 07/07/2014 - 05 / 09/ 2014



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#### 1. Introduction





Fig. 1

Fig. 2

1998 the cultural landscape of the the Delta Baix Llobregat is protected by the Initiative of Parc Agrari del Baix Llobregat. This world wide recognized initiative was necessary to defend the environment from the pressure of urban sprawl, taking place since the second half of the last century.

Due to the fact, that the Delta of Baix Llobregat is one of the last undeveloped places in the direct catchment area of Barcelona, it bears a lot of potential for recreation and leisure time activities.

Protection from further industrial activities, which would come along with increasing air- and water pollution is also important due to the fact, that the the area is used as a ibir d motorwayî. People from Barcelona, but especially inhabitants living in the cities adjacent to the park could benefit from that fact a lot. But due to various reasons that potential is underachieved. Main reason is the growth of the 14 municipalities enclosing the park.

Whereas residential areas started to spread mainly during the first part of the last century, a belt of industrial areas was set in front, constructed during the second part of 20. century, consuming the agricultural areas steadily.

In combination with new motorway connections and the rail-way line a new infrastructural-industrial iintermediate zoneî had emerged.

Today this zone is the reason why park and residential area seem to be very separated from each other.

It varies in dimension and shaping but the areas connected to-Castelldefells, Gava, Viladecans and el Prat de Llobregat have the largest extend.

Thus, the accessibility to the Park is most challenging in these municipalities.

The examination of these areas is the subject of the investigation.

Although the accessibility of Parc Agrari was already studied by the iAgencia Desenvolupant Urb‡î and some of the existing connecting points were outlined and marked in various manners, by a closer look one notes, that these idoorsî to the park are mainly just orientated towards particular users.

In most cases to private transport, as there is no space for pedestrians and cyclists.

In this work the specific access points are documented and reviewed to mark their inadequacy for non- motorized users. Additionally the agricultural areas protected by the initiative Parc Agrari del Baix Llobregat are subjected to strict rules. On the one hand these are necessarily to preserve and protect the cultural landscape, on the other hand an opening of the park for different users and uses is excluded or difficult to implement.

The fact, that the infrastructural-industrial border is so difficult to cross, as well as the fact, that restrictions are a lot inside the Park for most areas officially accounted for part of the Parc Agrari lead to the approach, to develop tools for precisely this fringe zone.

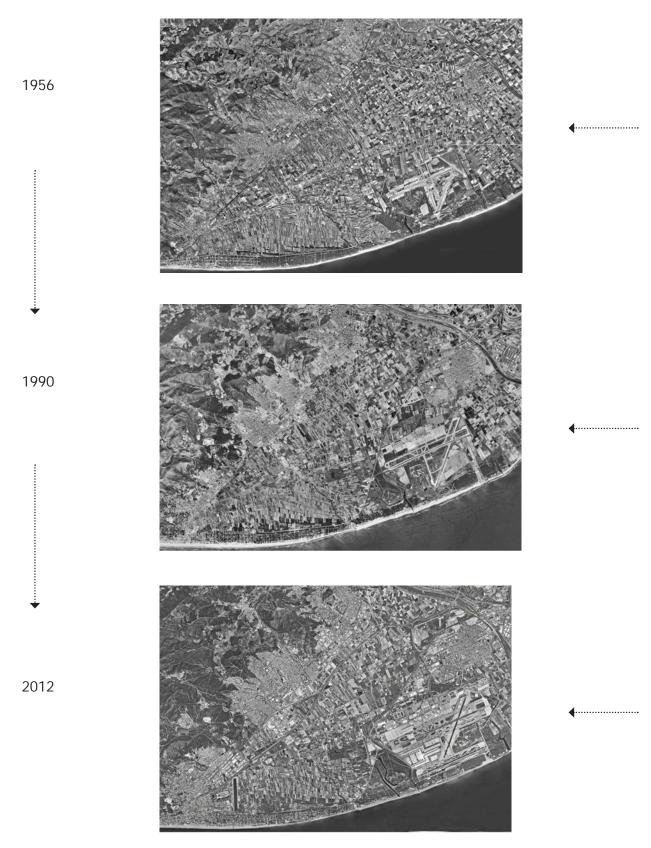
By different scenarios possibilities are presented to demonstrate manners how the cities could be reconnected to the park.

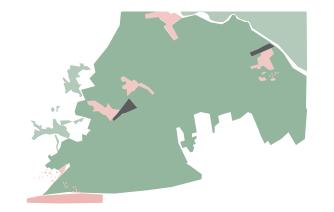
How the area could convert itself into a ipossibility spaceî, or filterzone instead of a border.

How and where it could be bridged or crossed and act as an intermediary between density and wideness, between urban and agricultural.

## 2. Analyses

Historic development of the lower part of Baix Llobregat





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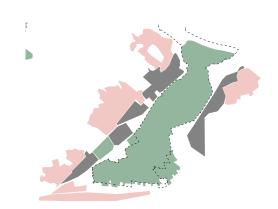
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### Limitation of space

Due to the expansion of residential and industrial areas and the extension of the airport, agricultural areas were reduced drastically.







## **Situation today**

## positive









Fig.3







Fig.6







Fig.9







Fig.11

Fig.13

## negative







Fig.14





Fig.15 Fig.16





#### positive

To get an impression of the actual situation in the park, the previous pages showed positive and negative aspects of the surrounding.

- -The cultivation of the smalscale agricultural structures (Fig. 3) supported by the Initiative ÑParc Agrari del Baix Llobregati since 1994.
- the irrigation system, irrigating the fields since 1700. (Fig. 4)
- first approaches of a design for cyclists and pedestrians. (Fig.5)
- the Maslas, typical Catal·n farmhouses, still in use mostly, but in many cases a renovation is urgent.

A good example of an adapted conversation and design is NCan Simonì (Fig.6)

This renovation, completed in 2010, serves as an information canter of the Parc Agrari.

- Due to the high fertility of the area, every piece of land available is cultivated, even left -over spaces, resulting of infrastructural projects.:

After short periods of time residents start to divide plots and cultivate them.

Even if the size of the plot is just one to two squaremeters, like in Figure 7, where it involves the leftover between a rail track and a pathway.

- Besides occasional infrastructural establishments for pedestrians and cyclists, there are also zones protected as natural parcs. Because of the installation of seats and places intended for having a rest these areas are the main attractors in the southern part of the park. (Fig. 8/9)

Positive and expandable is also the direct selling next to the property. (Fig. 10)

The traces of urbanisation are seen in many areas of the Parc, these traces are documented as the negative examples of the development.

#### negative

Critical uses for environmental and agricultural areas like a waste incineration plant (Fig.13) penetrate the area, expanding from the industrial border zone.

To stop this tendency it is important to call attention to the area to reach a bigger group of stakeholders for the park.

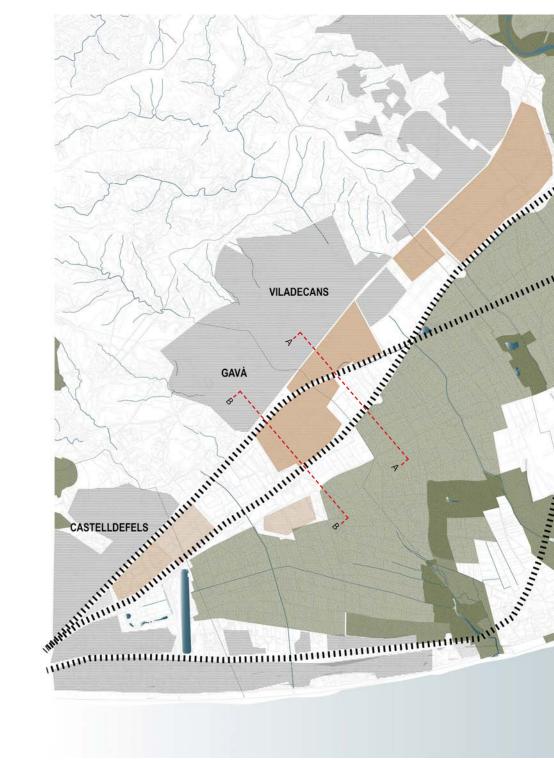
But as shows on the following pages, the problem is mainly the accessibility.

If there is access, then these are lowly and unattractive underpasses. (Fig. 14)

Figures 15-17 show the traces of urban sprawl for example motorways, bill boards, or power lines..

As the biggest barrier the huge traffic lanes could be seen, that make any access to the area impossible. (Fig. 18)

#### **Barriers of the Parc**



Main problem: Parc is enclosed



Infrastructural Barrier Agriculture Residential Industrial

#### **Spatial Situation**

The problem of insufficient accessibility has emerged on the one hand due to few gateways to the park, but on the other hand due to the industrial zone, located between Parc and Cities. This zone doesnet invite to pass though.

The sections on the following pages show the spatial situation between Park and residential area.

Although the Nborder lineì, which was set by the NAgencia Desenvolupant Urb·ì, is marked to divide Par c and surrounding area.



	•	
Villadecans		
rocidontial area	inductrial area	••••••

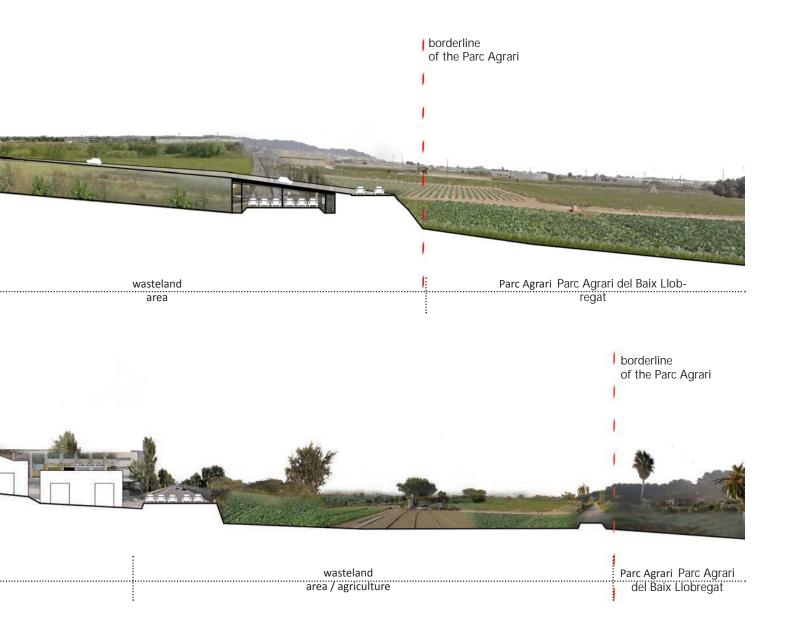


Gava	Gava
residential area	industrial area



Partly it is not recognizable, why some spaces are part of the area, officially assigned as ÑParc Agrari del Baix Llobregatì, and some are not, although having the same agricultural use.

Otherwise especially these undefined zones of wasteland and agriculture could be NPossibility spacesì. Because these areas donët underlie the stringent restrictions there could be a lot of potential.



#### Examination of the border zone area



Fig. 19

The border zone, shown in the sections provide an opportunity to work as a intermediary zone between Parc and residential area.

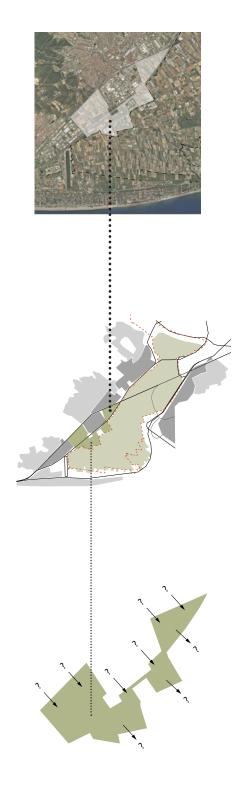
In Fig. 19 the developable area is marked. The area is neither used by industry, nor is it part of the officially Parc space. In most areas the land is left fallow.

The approach of this work pursues the target, to change the area into a filterzone, with small interferences. The solutions should be easy to realize.

## As a first approach all access points between city and Parc were documented and

examined by their usability and their orientation.

As a result, it showed, that there are some connection points, but that these, if any, are oriented only in some parts to pedestrians and cyclists. In most cases these roads are strongly frequented or motor-way entries.



# Examination of access possibilities into the area connected to Viladecans, Gava and Castelldefels

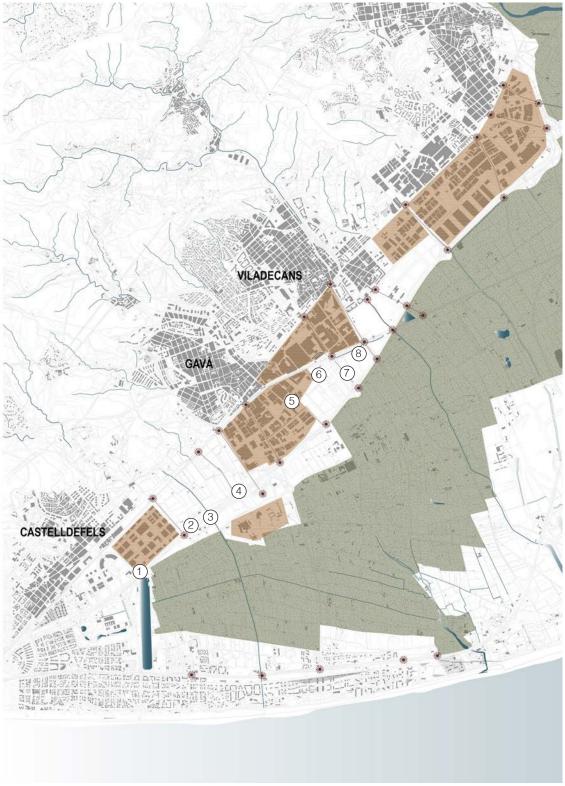


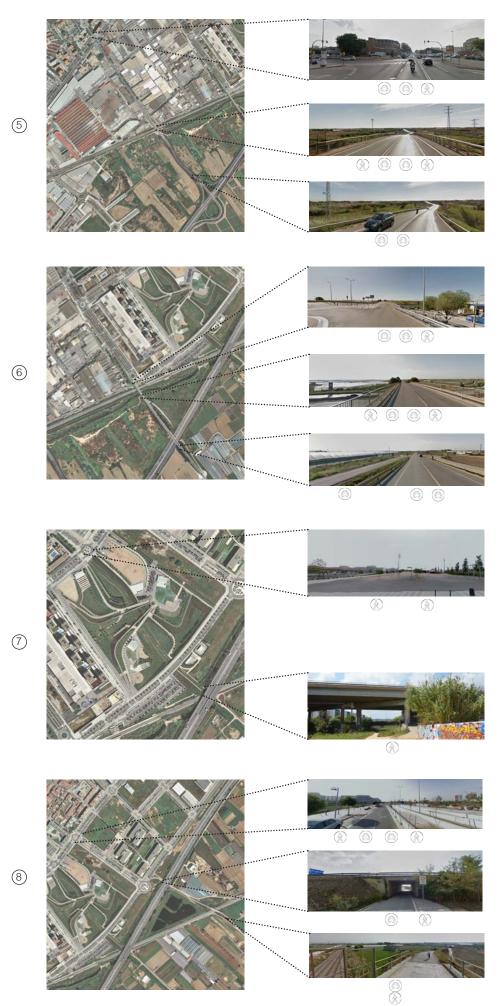
Fig. 20

In Fig.20 are marked eight crossing points.

On the following pages the spacial situation is shown with an areal photo.

Additional photos of the access roads and points of departure. With pictogramms the user groups, which should use these crossing streets are shown.





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#### 3. Concepts

#### **New Connections**

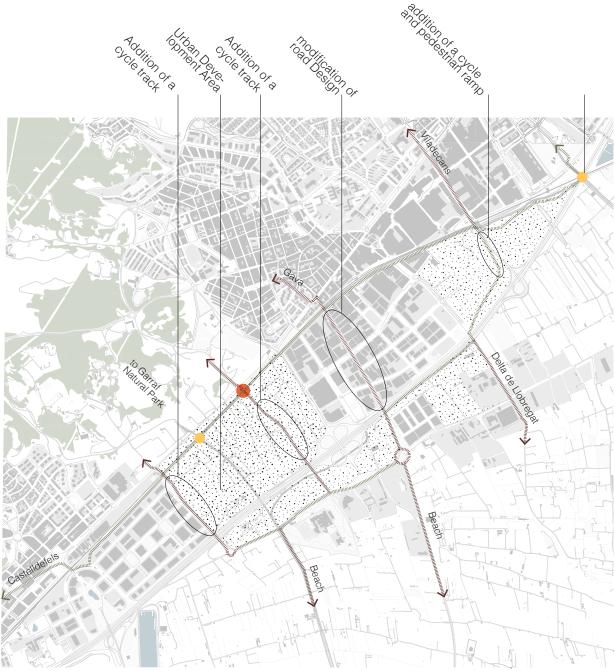


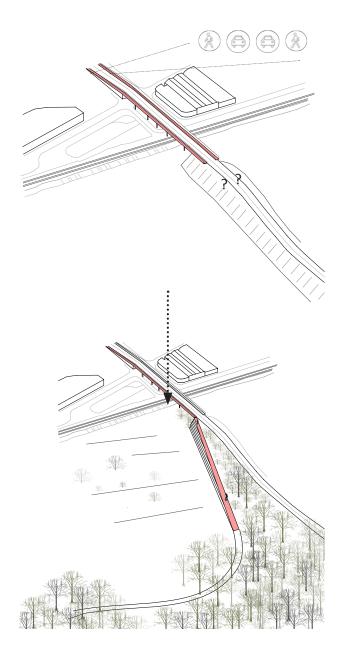
Fig. 21



After the Analyses of the access points it was checked how and where the access roads could be extended into pedestrian/cyclist-friendly pathways and where new connections or path would be useful.

Fig. 21 shows the result.

A specific focus was set on the connections, that could maintain a better/ or new connection to Castelldefels, Gava and Villadecans.



#### The actions include:

- the addition of a cycle path, if the existing road dimension allows it.
- creation of a path system along the infrastructural borders
- proving access to the new designed Nfilter zonei due to new installed ramps

Although there are streets with pedestrian areas these pedestrian pathways often stop abruptly.

For example at accessoad Nr.5.

Due to an addition of a multifunctional ramp on the one hand a continuation of the pedestrain path could be ensured, on the other hand access to the new created Npossibility zone Ncould be achived.

#### **Noise Protection**

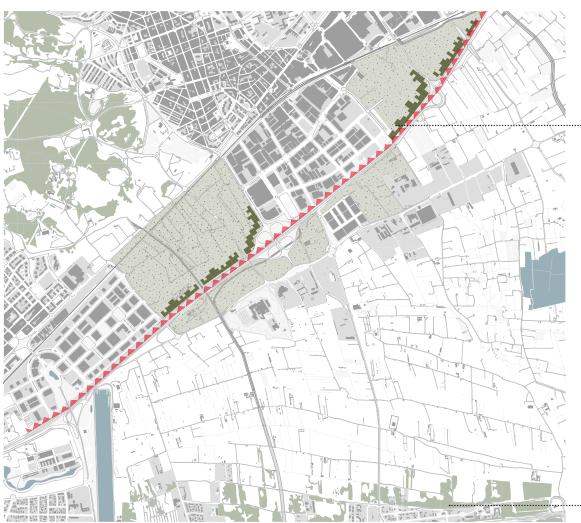


Fig. 22

To allow the usage of the new filterzone area, some conditions have to be changed. The previous pages described possible ways to access. Another factor, that limit the quality of a stay is the noise level, caused by the six-lane motorway.

At the southern edge of the Parc clusters of pineforest clusters shield the noise.

Farmers sold their land to the municipality, that wanted to invest in building land. But due to a change of government, building and construction was not possible anymore. Since then the plots are left to their own. This led to the beautiful pattern of forest clusters, we find today.

(Fig. 23 - 26)







Fig. 25



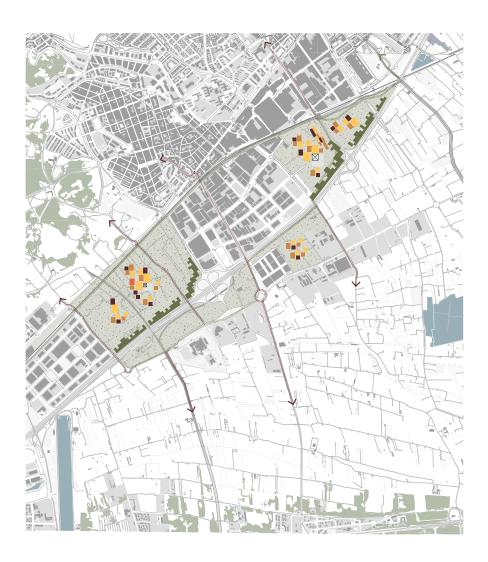
Fig. 24



Fig. 26

This zone acts as a model for the western fringe. By specific afforestation along the motorway, the quality of a stay will be increased. The spatial quality caused by the edges and recesses will be experienced by a pathway, that pass between ramp and underpass.

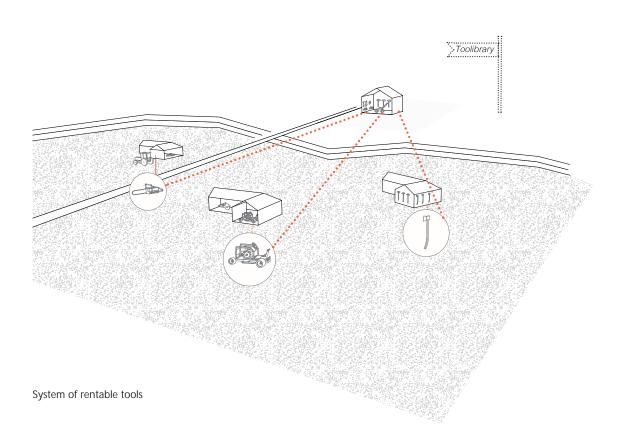
#### Possebility spaces



After ensuring the accessibility with pathways and connections, as well as rising the the quality of stay by forrest clusters, serving as noise barriers, a new zone is created, waiting for residents to acquire.

The tendency, that remaining left over spaces are cultivated by local residents, can be seen since some decades. This form of agriculture is not accepted by the traditional farmers, although conventional farming is often not possible at these areas hardly accessible. So, accepting this kind of cultivation of the waste land could be a way to use the area. Although it could be a possibility how farmer and residents could interact.

This could happen for example due to a system of rentable agricultural or gardening tools.



In special small buildings farmers could provide tools, they already have a newer version of, donëtneed anymore, or are only used temporally. These could be rented by interested hobby gardeners for a monthly rent fee. A system of identity cards or an App could also inform about large appliances, which could be rent, but picked up at the farmers place, etc..

Activities or places where farmers and residents meet and benefits for both sides arise are demanded. With the renting of tools, which are in use only temporally a Nwin-wini Situation for both sites could be generated.

Based on this cooperation new offers could be developed, such as seminars from farmes to amateur gardeners.

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#### 4. Conclusion

After my stay on-site in Barcelona, I got to know the beauty of the space of Baix Llobregat.

I also became aware of the importance of the area, due to the fact that it is one of the last unbuilt pieces of land in the direct catchment area of the capital region of Barcelona.Because Barcelona is built so densely the area could play a major role as local recreation area.But as described on the previous pages, due to the enclosment of the Park, only few people use or even know the Parc.To enlarge the group of stakeholders I described the concept to developing the fringe zone, and transform it into transition zones Maybe this could be a way to pay the attention and importance to the Parc Agrari del Baix Llobregat it should deserve.

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#### **Figures**

- Fig. 1: http://www.weltkarte.com/europa/spanien/provinzen-spanien.htm
- Fig.2: http://en.wikipedia.org/wiki/Baix\_Llobregat
- Fig. 3 20: Under the responsibility of the author



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A ibottom up appr oachî (the initiative of launching a COST Actio n comes from the European scientists themselves), i‡ la carte participationî (only countries inter ested in the Action participate), i equality of accessî (participation is open also to the scientific communities of c ountries not belonging to the European Union) and iflexible structur eî (easy implementation and light ma nagement of the research initiatives) are the main characteristics of COST.

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