

# INFRASTRUCTURE DEVELOPMENTS AS CATALYSTS OF MASSIVE REGIONAL DEVELOPMENT PROJECTS MADE BY PPPs

The main purpose of this presentation is to address the very urgent and highly challenging goal : to provide economic development technologies able to change the unpleasant and dangerous reality of growing gap between the economies at the top and the other ones.

The main tool able to do that should be massive regional economic development projects to be done as clusters of numerous economic activities centered usually around a large infrastructure development serving as a catalyst there.

The basic understanding of all the economic principles and requirements of such an approach will be briefly summarized and then the dimension and form of the challenge specified.

The final recommendations for the massive regional development super projects represent an enormously difficult goal to transform them to real, practical projects made by Public/Private Partnerships technologies. Nevertheless, the feasibility of the massive regional economic development technologies can be at best demonstrated by examples of concrete projects in preparation : three of them are briefly described.

## 1. The fundamental goal

The **gap** between the **economies at the top** and **the other ones** has been **continuously growing**, at least in **absolute GDP/head terms**. Despite a general consent exists that it represents **quite unacceptable** and at the same time **very dangerous situation** and despite many promises from very prominent subjects have been given that an essential change has to be made, the **real results are far from the needs**.

The **explanation** has been simple and rather straightforward.

A **typical economy** from those **at the top** has its **yearly GDP/head** positioned around **\$30 000** (there are economies with over \$37 000), a rather **strong economy in transition** has it around **\$5 000** and a **typical developing economy**, say, around **\$800**. In such a framework every 1% of the yearly GDP/head growth of this typical top economy represents \$300, while only \$50 for a typical economy in transition and only \$8 for a typical developing one.

Let us choose the **current dollars comparisons** as the best and most honest method : two economies will be on the same position if GDP/head values expressed in current dollars will be the same.

If we remember that **GDP/head growth in current dollars** is a *result* of a number of influencing factors, most important being the *growth in fixed dollars*, the *inflation* and the *exchange rates turbulencies*, we may accept 4.5% growth of our typical top economy in current dollars as a rather conservative evaluation resulting from a 2.5% growth in fixed prices, 2% inflation and exchange rate turbulencies of the world currencies (to compare with real world numbers: e.g. GDP/head of the USA was equal to \$16 559 in current dollars in 1985 while the EIU prediction for 2001 was \$37 900, which is a 5.3% yearly growth).

Under these assumptions the **4.5% growth** of our **top \$30 000 GDP/head economy** will bring **another \$1350**. To achieve the same absolute increase the economy in **transition** would need to **grow for 27%** in current dollars to keep the \$25 000 gap, while the **developing** one would need to achieve the **168.75% growth** to preserve the absolute gap of \$29 200!

Of course, all these numbers are results of **purely mechanical calculations** with percentages only. But there is a strong difference in them. If the 27%, resp. 168.75% growth numerical requirements well explain why the absolute gap grows, while they can hardly serve as a base for real economic considerations, the **demand for an economic convergency** has been always understood as a **challenge worth of real considerations** : if this challenge should be transformed onto a real development policy the numbers just presented will become **real numbers specifying the dimension and exact description of this challenge**. Again in numerical terms : anybody who would strive to converge to our \$30 000 GDP/head typical top economy growing for 4.5% in current dollars yearly would need to be able to propose such measures that his (e.g.) typical transitive economy will grow in such a way that it will catch its top ideal in a reasonable time period and even more efforts will be needed to do it for developing economies.

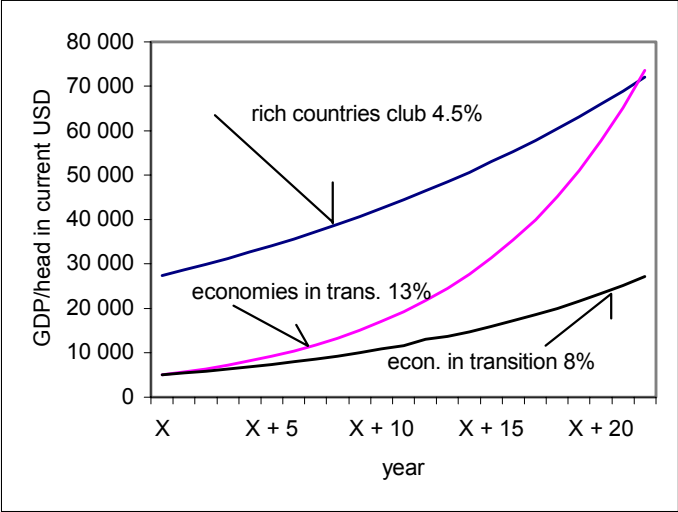
## **2. Specification of the convergency challenge : numerical evaluation of possible scenarios**

Let us suppose in the sequel that the convergency goal is to be done toward the typical \$30 000 yearly GDP/head economy with the 4.5% growth in current dollars and should be achieved at first by the \$5 000 GDP/head economy and, at second, by the \$800 developing one.

**2.1. The first case : the \$5 000 economy in transition convergency scenarios.** For simplification, **two scenarios** were calculated and pictured at the graph attached. Both scenarios were made under a *very simplified assumption* that growth rates will be constant over the whole time period investigated.

The **first one** expects **8% yearly growth** in current dollars. The result would be probably very dissappointing for the inhabitants of the economy in transition, for **the absolute gap will grow for 35 years** and only then, after **17 another years**, the **convergency will be achieved : 52 years** will be needed *altogether*, which represents more than two generations, therefore, **in fact a resignation toward the convergency** in terms or normal life expectations. Let us underline that

such a pessimistic result has been obtained despite the 8% growth in current dollars would be evaluated as rather impressive, usually.

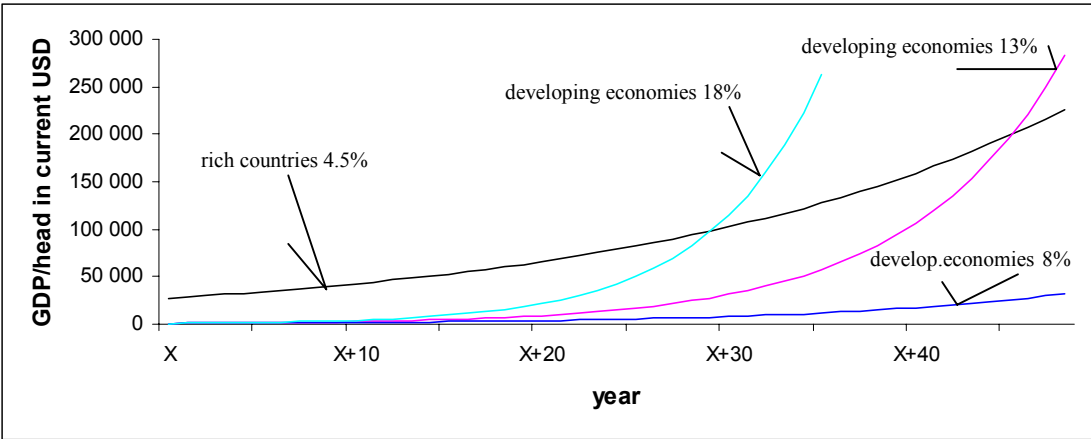


The second one expects 13% yearly growth in current dollars. Here, the result has been essentially better : convergency will be done „only“ after 22 years of very heavy efforts, within a single generation. Let us note that such results can be really achieved because the 13% growth in current dollars may be obtained as a combination (let us say very roughly) of a 7% to 9% growth in fixed prices, which has been achieved by some of the world economies, of a (say) 2% inflation

and of a strenghtening of the „transitive“ currency to the dollar.

**2.2. The second case :** the \$800 developing economy. Here, three simplified scenarios are presented.

The first one expects 8% growth in current dollars. After 50 years of such a relatively intensive growth the developing economy will have roughly \$37 500 GDP/head, compared to \$247 000 of the top economies and it will be on the position of about 15% of the strength of the top economy, which is better than now which is less than 3%. However, the absolute gap will grow to \$209 500.



The second one expects 13% growth, which will result in convergency after 46 years.

The third works with a giant 18% growth which appears to reach convergency in 30 years.

**2.3.Conclusion.** The **very simplified scenarios** just presented are **again results of purely mechanical calculations** but, at the same time, they have brought a **very clear message** by describing, rather precisely, the **dimension of the challenge of convergency** : **if anybody would really want to achieve it earlier than in the uncertain future of centuries, he will need to know how to achieve the growth curves able to provide the same final results as our simplifications had done.**

In our simplified scenarios the challenge to do it in the span of one generation „only“ represents the challenge to get, say, 13% growth in current dollars for 22 years for the relatively strong \$5 000 GDP/head economy in transition and a giant growth of 18% to do the same for the \$800 GDP/head developing economy in 30 years.

On the other hand if somebody promises the convergency without specifying such or similar scenarios he is a performer of fairy tales for adults only.

Note. We have **carefully avoided to use purchasing power parity power comparisons** as well as to use this characteristic for the purpose of economic development goal: if the purchasing power parity is an useful indicator of social situation of the different countries it cannot be used for economic development purposes simply because nobody can buy anything for the artificial „currency“ of the purchasing power parity, at least nothing can be bought for it outside the country concerned.

The key prerequisites of the successful participation on the free market, open global economy are e.g. a top equipment everywhere, international business nets and so on, all possible to do only by honest dollars (or by a similarly strong currency) not at all by working with the purchasing power parity „currency“ magic.

Let us underline that the situation could be essentially different in the past when some of the successful economic transformations were done in an environment of very closed economies: here the purchasing power parity advantages could be efficiently used, but not anymore in the open global economy.

Because of that and some other influences, too, the admirable experiences of so called East Asia Tigers cannot be simply copied now any more.

### **3. Requirements of a growth to convergency**

It has been well recognized and well confirmed by the practice that the global open economy allows only one well functioning position : to be among those at the top, all other positions are positions of the losers, maybe some of them are stronger losers the others weaker losers but losers in any case.

### 3.1. Economies at the top

To be at the top *now* requires a GDP/head between *\$25 000* to *\$35 000* or more (\$20 000 can be understood as almost the top) in quantitative evaluation.

#### Qualitative requirements :

- ◆ political and social stability, security, credible and functioning legal system
- ◆ top structure of well orchestrated and highly efficient free market economic activities with high share of high-added value, at best high-tech products
- ◆ perfect incorporation and lead position in the global economy
- ◆ high level of motivation everywhere
- ◆ advanced, highly skilled workforce and a top educational system and R&D
- ◆ top technologies, top equipment and a top infrastructure
- ◆ high level of understanding and mutual cooperation between public and private sectors.

Investments : to keep this position investments to economies of these top countries have to be regularly done in the range of about *\$100 000 per an average workplace* in the time period of about (say) *8* to *12 years*. This long time average represents a combined output of highly investment intensive activities and of the other ones - e.g. *Intel* with its about *70 000 employees* invests yearly about *\$5bn* for new production facilities and about *\$2bn* into R&D.

### 3.2. Requirements to get to the top

All the experience with successful economic transformations clearly indicates that to achieve all the features qualitatively and quantitatively attributed to the top economies the following basic principles have to be respected :

- ◆ the transformation procedure has to be undergone at a region of at least *1 million* of inhabitants, better with *2 millions* or more, to achieve a suitable diversification of the economic activities intended and, on the other hand, an appropriate level of synergic effects
- ◆ the region has to be well prepared for the massive economic transformation : there need to be the *skilled workforce* required, the *high level motivation* and *all the other* qualitative aspects listed above
- ◆ a sufficiently dense set of sufficiently strong and prospective projects has to be prepared, including *attractive high-added value* like high-tech activities, usually centered around a

grand infrastructure development like a *large airport, highway and/or railway network, power plant* and so on

- ♦ in financing these projects and/or transforming and enhancing the existing economic activities in the region the **same level of investments** need to be done as in the economies at the top, thus about **\$100 000 per an average workplace** in the time period of **10 to 15 years** (let us call that „*development constant*“).

If all that will be successfully done, the region will enter such a **massive economic development** that will position on an **irreversible road** leading to **convergency** - depending on the initial position, on the achieved percentage of growth and so on, of course, another time period of several years to several decades will be needed to reach the convergency (during this time period all the requirements of the successful start and of the keeping the position of top economies, including the „development constant“ level of continuing investments need to be followed, too).

### 3.3. Experiences of the successful economic transformations

The experiences of all the successful economic transformations, like the regions of *Lorraine* (France), *Strathclyde* (Scotland), *Rhine* (Germany) and, recently, of the former *East Germany* well confirm that all these requirements, including investments of the „development constant“ level have been followed.

#### Former East-Germany case study

The example of **this last "economic transformation laboratory"** is extremely **important** for it represents a **"case study"** of an **almost ready** and (almost) **successful economic transformation** of a **former Soviet Bloc country**.

This **"case study"** illustrates that the **problems of transforming these economies** are deeply **misunderstood**, both **in theory** and, much more sad, **in the practice**: **THIS ASSERTION COULD BE REPEATED FOR ALL THE ECONOMIES IN TRANSITION AND (WITH MUCH STRONGER ACCENT) FOR THE DEVELOPING ECONOMIES.**

Some numbers: **in the time of 1990 reunification** the official estimation of **the East Germany economic transformation costs** was **fixed** to roughly **DM 10 bn**. It was **done by** the top West Germany and other world **top economists** and it was based on the "fact" that the former East Germany economy was the world top 10th - by the purchasing power parity estimations. The **other costs of the unification**, social transfers, unification of currencies and so on were expected to add **another DM 110 bn**.

**Up to now roughly DM 1 700 bn was spent for economic transformation**, thus roughly **170 TIMES** **A MISTAKE** as compared with original (and let us underline, very prominent expert evaluations); money transfers for social purposes and so on represent another, almost so high amount.

With such a huge investments the following results have been achieved: the average monthly income was DM 5 537 to DM 4 447 in 1999 for West to East parts, while GDP/head was DM 48 653 to DM 32 401.

On the other hand, all the existing problems, especially the high unemployment, may be attributed to initial misunderstanding of the situation; e.g. very weak position of SMEs in the East part is such a consequence.

### Greece contra example

To make a **contra-example**, let us remember *the Greece*. This country **joined the EU in 1981** in a position of about **1/3 in GDP per head compared to West Germany**. It has **now roughly the same**, maybe a bit weaker **position to the West part of Germany, too!** The explanation is rather simple, the **development constant requirements** have been **not followed** and **no** such as needed **strong, massive economic development projects** have been attempted.

To **understand** the **example of Greece** properly: it is **not an argument against EU membership** at all (it is almost sure that the position of Greece would be worse, probably much worse, if it was not an EU member), but it is an **argument against mythical expectation** of an **automatic massive economic growth if the EU membership is rewarded**. And the most important, this example is a **serious warning** to anybody **who thinks** that the **development constant needs can be avoided** and the growth toward convergency will be yet achieved.

### 3.4. The myth : infrastructure development will automatically invoke economy growth

And, at last, another myth needs to be commented, namely the myth of the expectations related to infrastructure development: it has been mostly thought that if the infrastructure is built all the other will come almost automatically, all the needed investors all the economic growth leading to convergency.

**No**, unfortunately **the things are not so simple at all**. If we abandon for a while that the resources of the economies in transition (not to speak about the developing ones) are quite unable to cover the task of completing all the needed infrastructure, another even more difficult problem arises :

if the **infrastructure development costs** are **very high**, the **transformation costs**, say, by the development constant requirements, are **giant** - the **infrastructure development costs** represent only around **one tenth of the total economic transformation costs!**

In numbers : if it can be very roughly expected that the infrastructure completing needs of a typical 10 millions of inhabitants economy in transition will be around \$50bn, therefore equal to the value of its yearly \$50 bn GDP, the infrastructure completing needs of a same size top economy will be about \$15bn only, therefore about 5% of its yearly \$300bn GDP: very different goals, indeed!

Moreover, if this (typical) economy in transition would be able, quite hypothetically, to complete all the missing infrastructure, it would face the problem to wait for the missing investments to complete the economic transformation, it means for another investments (very roughly!) in the value equal nine times the value of the investments used to complete the infrastructure.

By the myth such investments should knock at the doors automatically! Such a pure nonsense could only appear because nobody tried to seriously calculate infrastructure development costs not to speak about complete transformation costs and to evaluate the results.

We can conclude: to **achieve convergency** approximately **the same procedures** need to be done in the roughly **the same costs** as **in the former East Germany transformation**: but all of that needs to be done without the rich uncle behind, thus, all that needs to be done on an (almost) pure private business basis.

Note. The situation here will be even much and much more complicated in the developing economies as in the transitive ones. Because also the differences among the individual developing countries will be very large we prefer not to try for some generalizations here.

#### **4. The right technologies: super projects of massive regional developments by Public/Private Partnerships (large infrastructure developments as catalysts)**

The idea of super projects of massive regional developments aims to combine several requirements, which are mutually antagonistic at the first glance, into a functioning and profitable business structure which would be highly beneficial for the hosting region at the same time.

Really: as we have seen, investments at the development constant level are an absolute must if a real success (convergency) is to be achieved while it is quite clear that such investments are completely out of any realistic reach of any transitive or developing economy.

Thus, to **get such massive investments**, the **resources from abroad have to be attracted**: much precisely **private resources** for **no public funds** exist with **enough resources** for **investing in levels of development constant dimension**. If private resources are attracted the business activities to be done have to be such ones that a **profitable return** of investments is guaranteed.

Because domestic public institutions are not strong enough they cannot afford to be bearers of such guaranties of profitable return and nothing similar can be realistically expected from international public institutions. It follows that finally **no other guaranty** can be done different from the **business strenght of the project**, in other words, the **economic robustness** of the project **is the only guaranty that may be constructed**.

It is important to know that just the **grand size of super projects of regional developments allows to achieve such robustness**. It is because that a right management of such super project makes possible to transform the hosting region onto, in fact, an **isle of a top economy** and to do that at the **time interval of several years**.

Really, a region with a few millions of inhabitants is large enough to put there not only several main economic activities like a large car manufacturing facility, a large software producer and so on, but allows main subcontractors to settle there as well, to establish a lot of

other supporting businesses and, very important, to strengthen the needed education and training institutions as well as R&D facilities. Of course, if such a grand development featuring massive investments is done, infrastructure completion is not only must but a **goal financially feasible**, too.

In other words, such super project will be not only feasible but highly attractive for the private business incorporated, while their economic robustness and profitability will be derived from grand synergic effects deeply incorporated in the very nature of such projects.

From the business point of view, such a development should, at best, to have a form of an **"under one umbrella" project**.

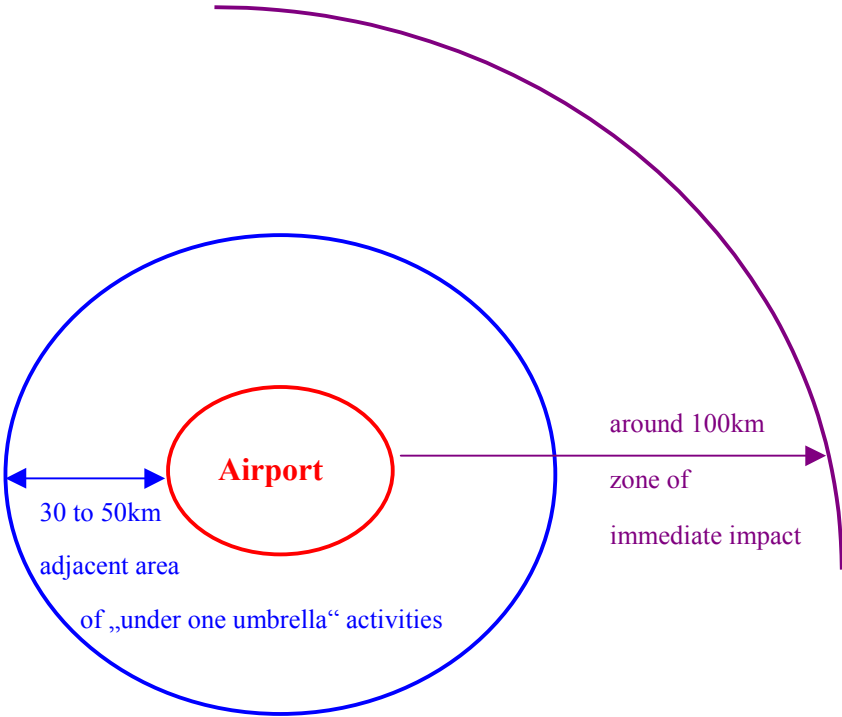
Such a project would be prepared in such a way that **all the concerned public institutions** will participate, from local municipalities to government, maybe some international public institutions, too, and, on the other hand, **private business**, usually several to several tens of large companies, from, say, manufacturing, construction and so on companies to financial institutions. When the project is *found to be feasible* a *set of memoranda* should be done **specifying roles of individual subjects** in the implementation and operation of the project.

If the **preparation phase is ready** a *company* will be formed responsible to **implement** the project, including *financing*, and then to **operate it**. Usually, the **public subjects** will be responsible there for such issues as area planning, support in accessing the needed land and infrastructure and so on, thus their *responsibilities will be mainly nonmonetary*, while the **private business members** will **do the rest, including financing**. **Very deep** and **very broad concessions** will be a typical feature of such projects as well as an (almost) **complete responsibility of the private business partners** for all the business components of the project, including responsibility for financial flows and related risks.

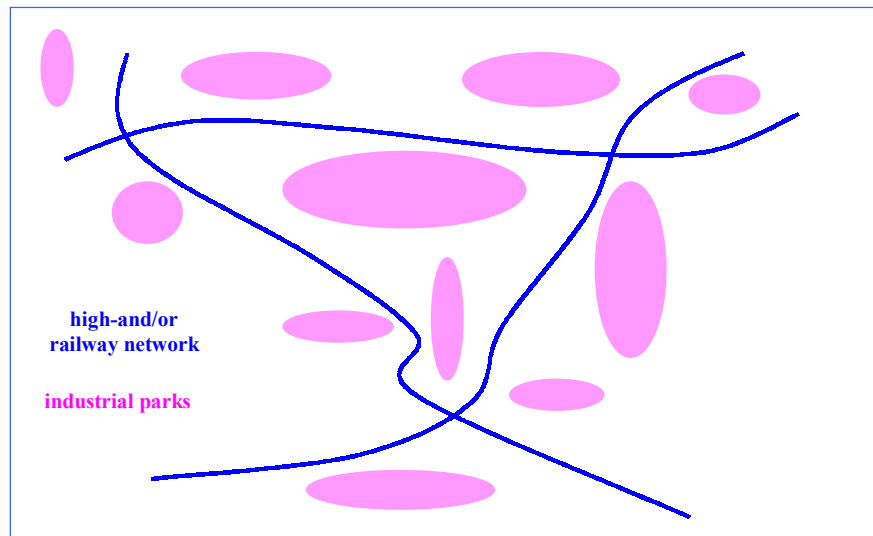
Let us underline that such an arrangement allows **to concentrate to the selected region investments at the development constant range** and to do that at a **business robust, profitable way**. Because a region only is involved, the needed investments will be large but possible,

while if a whole country should be attempted at one moment, the needed investment needs would be so giant that it would be impossible to gather them (also the size of a whole country massive development would be such a giant one that it would be impossible to master it).

Usually a **large infrastructure development**, like an **airport**, a **highway**, a **power plant** will be employed as a **catalyst there**, with **other business partners situated near to it** – see the *topological structures pictured*.



Such a concept of massive regional developments is the next step in application of PPP methods: usually a large infrastructure project located in a region will be accompanied by so massive industrial and other money making developments that not only the integrated costs of such a combined activity will be profitably returned but such an intensive economic growth of the region will be invoked that a clear road to the top will be irreversibly initiated.



If proceeding in this way, PPPs can very successfully meet all the very high expectations related to them: such integrated PPP or, at best massive regional economic development projects will be the tools of very essential departure from the failures in attempts to change the unhappy situation in growing differences between the economies at the top and the other world economies.

Of course, projects of this kind will *not be easy projects at all*, because a high level of cooperation will be needed not only between the public and private partners but also among, usually very numerous, private partners in such the projects. But these are problems of an efficient management of these projects, far not the problems impossible to override.

## 5. There are two super projects now which are considered to be done in the Czech Republic, a third one is at the doors

The first is the **Brno Hub Airport Complex** project, a hub airport with about 30 km<sup>2</sup> of industrial parks around this "under one umbrella" super project. A feasibility study has been completed and first steps toward implementation are prepared.

The second is the **Completing Highway Network project**. Here a short pre-pre-feasibility study has been done confirming, say, theoretical feasibility of this project. The first step to decide a practical feasibility was done in June 2000, when a Workshop organized by the UN/ECE BOT Expert Group and the Ministry of Transport and Communications of the Czech republic was done in Prague - the Workshop recommended to establish a Task Force to deeper study the project and (if it is feasible) to prepare it for implementation. The domestic part of this Task Force has been made and have met several times to prepare some basic documentation and recommendations.

The third project being briefly sketched and also a pre-pre-feasibility done is the super project of a massive development of the **Ostrava - Katowice region**. This project will be feasible if the Brno Hub Airport Complex project is successfully initiated (and may be initiated with a delay, say, 3 to 6 years).

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