

## **Challenges and perspectives of the construction industry in Europe**

Dear Presidents

Dear Colleagues,

Ladies and Gentlemen,

FIEC, the European Construction Industry Federation, represents, via its 29 national Member Federations in 26 countries, construction enterprises of all sizes – small, medium and large – which carry out all forms of building and civil engineering activities.

FIEC is the officially recognised “social partner” representing employers in the European Sectoral Social Dialogue of the construction industry.

A few words about myself: I am a French engineer graduated from the Ecole Polytechnique and from Telecom Paris-Tech, I started my career spending 12 years in the French Telecom organisation, before joining a construction company which became Vinci, where I spent 30 years (including 8 years in Germany), having had experiences in leading positions, for example as general director of Eurovia, the road construction branch of Vinci.

I have been elected as FIEC President in June 2016.

As FIEC President, It is more usual for me to speak about the construction industry to people who do not know a lot about what our business is.

I try to explain to them that we are not really an industry, because our works are not manufactured in a factory: even if we use and put together products or pieces coming from the industry, we build always prototypes, in locations where we stay sometimes only a few days.

We are not really an industry, even if we speak from construction industry..., and we are not a service, even if the works we achieve allow the delivery of services.

I mention the fact that we are neither an industry nor a service because it is a main task for the FIEC President to explain this situation to people from the European commission or administration willing to impose to the construction rules or regulations they have defined either for the industry or for the services.

We are really caught in a vice-like, between directives coming from the industry applicable to our sector without being adapted, or regulations coming from the services applicable to our employees or companies without being transposed.

But the construction sector has a lot of specificities: it is a very complicated business which deserves more attention and may be also more consideration.

We represent about 9 % of the GDP, almost 15 million of employees in Europe, who are working in about 3 million enterprises, mainly SMEs gathering less than 20 people.

Without the solutions that the construction brings, It will not be possible to address the challenges that Europe has to face:

- more sustainable development,
- better energy efficiency,
- adaptation of the infrastructure to the climate change in order to protect the territories against the impacts of big meteorological events,
- making smarter cities,
- using less natural resources.

All these European challenges, that are also worldwide priorities, are mainly challenges for the construction sector, but not everybody is aware of that.

Thinking about what I wanted to say to day, the first item that came in my mind was what we have recently decided to call, inside the FIEC, Construction 4.0.

If you had invited me two years ago, I would had mentioned, being not very original, the Building Information Modelling as main subject, the BIM we have been speaking about for more than 10 years.

We know that the BIM, the use of the digital technologies in both our companies and our construction processes has and will have a big impact on the whole sector, changing the ways we work inside the company, but also the ways we work with our clients, suppliers and subcontractors.

Transparency, efficiency, savings are expected increasing by developing the BIM.

The FIEC Manifesto you can find on our website describes perfectly what BIM means, offers and provides.

But for the time being, we have to consider that BIM is becoming to be only a part of a bigger framework, a bigger challenge we decided to call Construction 4.0, copying the concept Industry 4.0 used in the manufacturing industry.

We shall now speak about Construction 4.0, because things are accelerating in our sector, as it happens for example in the car industry: In the last five years, we did not dare to imagine that the car without driver could arrive on our streets in the next five years: it is not excluded anymore.

In our construction business, I did not imagine that I could one day, before retiring, speak publicly about robots used in our business.

But today, I am obliged to mention that I have seen experiences, movies or equipment allowing us to consider that robots will become more and more a part of our business.

It will take time, but surely less than we think, and those who doubt should think about how quickly some of you have incorporated the drones in their daily business.

I do not want to elaborate what Construction 4.0 has to be or will be, because I do not know. I have however the feeling that we will have to assemble in our works more and more integrated and sophisticated pieces, enabling higher and higher performances, but making our job more and more complex, meaning more and more opportunities for engineers.

Nevertheless, we have to be careful not to be overtaken by other stakeholders that could be more innovative or less conservative in their relationship with our clients, and to give them ideas that could impact our value chain.

To diminish the greenhouse gas emission,  
to adapt the existing infrastructure to the new mobilities,  
to reduce the consumption of natural resources and to protect the biodiversity,  
to mitigate the consequences of natural catastrophes,  
that are the challenges we have to address, as citizens and as entrepreneurs.

As entrepreneurs, we have and we want to deliver the solutions, but for being able to implement them  
we need a fair playing field,  
we need an adequate social regulation,  
we need clear technical rules.

Whether it is public procurement,  
or respecting technical and social rules at home and in other European  
countries,  
or identifying the correct construction material, allowing contractual and  
legal requirements to be respected,

all of this has both national and European elements,

referring to complex issues currently being addressed by different services  
of the European administrations, or already in the legislative arena,  
without necessarily providing adequate answers.

It is the main duty of Fiec to work with the European services for making  
things more efficient: the job is not an easy one.

We have a lot of problems with the posting directive that allow to an  
European to work in any European country; the directive will be revised in  
the next weeks, but without taking in account a revision of the Social  
Security directive, which would be the only way for ensuring a good  
solution.

We have serious worries about the ideas put on the table by the European  
Commission, willing to create a kind of identity card for companies,  
allowing them to work everywhere in Europe, without offering reliable  
possibilities of controls of abilities, competences or references.

We are working a lot about the Energy Performance in Buildings directive, coming from the DG Energy, directive which is also in a process of revision, but without being coordinated with a new initiative, called "level's", coming from the DG ENV, that regards the sustainable construction of buildings, but making things not coherent, if not contradictory with the Energy performance directive.

The main questions hidden by these two different initiatives are:

How to measure the performance of the buildings or the works we have built?

What are the Key Performance Indicators we want to use for measuring the performances?

How are they defined?

How are they measured?

In our daily work, we know that the lowest price takes always a big advantage, because the link between the costs and the level of the final performances is not easy to describe in a tender, or to take in account in a contract.

To be able to create and promote solutions, we need you, engineers of different specialities, we need your contributions and your commitment through your national federations, for receiving your proposals, your opinions, and, ideally, having some of you attending to the meetings or participating to the dedicated working groups; If not you, who else?

You are those who represent the Excellence of the European Engineering, combining tradition and innovation, ensuring the correct maintenance of existing works as well the development of new solutions; you have published “ the Civil Engineering Heritage in Europe” I recommend to everybody: who else could better than you, explain our business and help to define the framework in which we want to work in the future?

Before going on, let me speak shortly about the state of the construction industry in the European Union.

Fiec publishes every year a document describing the situation in all countries.

In 2017, the EU total construction output is expected to increase by 2,2%. This recovery process, which has been observed since 2014, is very modest, but seems to be steady, at least at this level of aggregated data.

However, pre-crisis levels are far from being reached yet, except for the housebuilding segment (in this regard, may be should we see an impact of what has been built for the migrants).

Moreover, behind the overall picture, the situation continues to vary significantly from one country to another.

But what are we observing all over the European Union:

There is a clear investment gap considering the existing needs!

In the on-going public austerity debt-reduction regime, Member states have neglected, for many years, investment in the high quality infrastructure networks that are essential, and they have failed to invest in the much needed affordable homes for their people.

In particular, the maintenance, renovation and upgrading of these core assets have been neglected dramatically, as we all know, for example from reports on the state of rail, roads or bridges.

This is crucial for the future competitiveness of the EU.

Junker has understood that, and the “Investment Plan for Europe” he launched in 2014 open interesting new ways.

What is the Juncker Plan trying to do?

To stimulate growth in Europe, by promoting long term investment, in particular in infrastructure and in energy efficiency.

A few years ago, financial institutions did not invest in projects that did not ensure a pay back within ten years.

It was a golden rule for them; it was crazy, and it killed a lot of infrastructure projects.

The Juncker Plan aims to correct that, by creating new tools dedicated to long term investment projects financed by private investors, which are not bankable without public support.

The goal is to promote private financing in long term investment, and to calculate the smallest possible part of public investment needed to make the project feasible.

The Juncker Plan also attempts to remove all the barriers against Public Private Partnerships, and facilitates a stable tax and legal framework.

And in order to enhance the visibility of European projects for private investors, the Juncker Plan created a European Investment Portal of Projects (EIPP), allowing the owners and project promoters to present and describe their projects to potential private investors.

The EIPP was launched one year ago but faces difficulties in attracting interesting projects... This is the reason why FIEC proposed that the European Commission help promote this portal at regional level, for giving also more visibility to smaller projects.

The main idea is to allow the interested Regions to have a Regional Portal as part of the European one.

It has to be clear for everybody: we will never find enough public money for financing all the projects that have to be achieved in the next 20 years, and we have to be convinced that each time it is possible to replace public money by private money,  
it has to be done,

We are those who can convince the politicians and the administrations that there is no other way than the development of Public Private Partnerships every time it is appropriate.

Politicians do not know how to proceed: they are waiting for solutions from us.

The administrations do not do a lot, mainly because they do not have the expertise in financial engineering to achieve the highest leverage effect with the lowest amount of public money.

When we speak about Engineering Excellence, we think mainly technical engineering;

but we have now to develop and promote a Financial Engineering Excellence, offering to our clients solutions for achieving projects they have not the possibility to finance through the traditional ways.

The project has to be designed and adapted according the financial opportunities and requirements,

And the technical and financial aspects of a project have to be optimised together at the same time: Who else can do that, if not you, the Engineers.

Which means that some of you have to enhance their technical talents with innovative financial know-how, allowing to find a good match between the life cycle of the project, and his financing.

Without forgetting to try to estimate the risks linked with the project, estimation always needed for the private investors.

Last challenge we face, but not the least.

If we will see in the future projects we cannot achieve because of the lack of financing,

I am afraid we will see more projects we cannot deliver because of the lack of trained people able to manage and to run the project successfully.

I spoke a few minutes ago about the recovery we observe on the construction market since 2014: I have not said that we are already under pressure, because we do not find enough skilled people for managing and achieving the contracts we won:

Despite high levels of unemployment in many Member States, construction companies in several countries cannot find the right workers with the right skills.

It is for one part a consequence of the posting directive: companies in eastern countries are not eager to train people that leave their country for earning more in western countries,

And companies in the western countries are obliged, in order to stay competitive, to work with subcontractor using posted workers, and have no incentives anymore to train their own employees, because it makes them too expensive.

Lack of people ready to work in the construction sector,

Lack of willingness to train those we find, because of the costs: it is not sustainable!

Construction 4.0 is an opportunity to change this situation.

The rapid innovation being deployed in the framework of Construction 4.0 offers an opportunity to attract young people into our sector:

they have been raised with PC, tablettts and smartphones,  
they have all the requirements for being efficient and innovative by using new technologies,

but we have to speak to them,  
we have to show them what will be the construction sector tomorrow;  
it will be the only way for attracting the best young engineers,  
but the competition with other sectors will be fierce.

For being successful, we need visibility, but we need also to give more visibility to our activities.

We are in the core of the European objectives for the next decade:

Promotion of sustainable transport infrastructure,  
Shift towards a low carbon economy,  
Enhancement of the competitiveness of SMEs  
Investment in education, training and lifelong learning,

Our challenges are now  
to innovate in the right direction,  
and to attract and to train the people that construction will need  
for delivering an inhabitable world tomorrow.

Construction is the solution: it is a duty for everyone inside this room to explain that to everybody outside.

I thank you for your attention.