

**7<sup>th</sup> HIGH LEVEL FORUM**  
***“INNOVATION for tomorrow’s  
INFRASTRUCTURES”***

**SESSION**  
***“ALL IN”***  
**Workshops**  
***Monday, November 12, 2018***

### ➤ Context:

- **A new feature** designed to **enrich** the Program of the High Level Forum

- *“A desire to benefit from the experiences of others”*
- *“A desire to share my own experiences”*
- *“Small projects could also inspire big findings ! ”*

- *The main goal is to provide each Attendee and each Ecosystem with a unique opportunity to describe their own experiences and express their own opinions around the theme:*

### ***“INFRASTRUCTURES & ECOSYSTEMS”***

- All Attendees of the High Level Forum will have **the opportunity to contribute to the added value of the Forum** (the spirit of a “Participative Forum” )

### ➤ Added Value:

- The expected added value of this session will be to get a better understanding about:
  - ❑ The **Challenges of developing new infrastructures** from various perspectives: technical, financial, societal, human
  - ❑ The **“positioning” of each Ecosystem** in terms of :
    - its involvement in Infrastructure initiatives
    - the ambitions & efforts developed by other Ecosystems facing similar challenges
    - the sharing of Best Practices and Lessons Learnt with other Ecosystems

## ➤ Themes

The theme of the Workshops is : “ **INFRASTRUCTURES & ECOSYSTEMS** ”






It will be worked-out through **three sub-themes**:

1. **Challenges** of tomorrow’s Infrastructures
2. **Implication and role of Ecosystems** within Infrastructure initiatives
3. **Best Practices and Lessons Learnt from Ecosystems** involved in Infrastructure programs

## ➤ Organization

- Discussion, exploration and collaboration up to 5:30 PM – with a coffee break at 4:00pm !
- 5 separate groups working in parallel – 5 rooms are booked upstairs
- Moderators are from several GIANT Members: CEA, Linksum, Minalogic, Tenerrdis
- 2 GIANT doctorates will help each group

*Each of you should go to one of these 5 rooms according to the color of the **sticker** on your badge :*

<i>Members of <b>team 1</b>:</i>		<i>Room <b>Mont Blanc 1 et 2</b></i>
<i>Members of <b>team 2</b>:</i>		<i>Room <b>Mont Blanc 3 et 4</b></i>
<i>Members of <b>team 3</b>:</i>		<i>Room <b>Kilimandjaro 1 et 2</b></i>
<i>Members of <b>team 4</b>:</i>		<i>Room <b>Kilimandjaro 3 et 4</b></i>
<i>Members of <b>team 5</b>:</i>		<i>Room <b>Makalu</b></i>

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**Plenary Meeting & Wrap-Up**  
***Tuesday, November 13, 2018***

## ➤ Themes

- **During the yesterday workshops,** we have worked the three following themes, through 5 parallel workshops:
  1. **Challenges** of tomorrow's Infrastructures
  2. **Implication and role of Ecosystems** within Infrastructure initiatives
  3. **Best Practices and Lessons Learnt from Ecosystems** involved in Infrastructure programs
- It's time now to present **the consolidation of the works** and to share the **outcomes of the workshop discussions.**

**Zoom  
on**



**CHALLENGES OF  
TOMORROW'S INFRASTRUCTURES**

**AMBITION, IMPLICATION AND ROLE  
OF INNOVATIVE ECOSYSTEMS**

**BEST PRACTICES  
& LESSONS LEARNT**



**FIGURES ARE IMPRESSIVE FOR 7 HARD INFRASTRUCTURES!!!**  
**THERE IS A BIG FUNDING CHALLENGE AHEAD...**  
*AIRPORT, ELECTRICITY, PORT, RAIL, ROAD, TELECOMS, WATER*

**GLOBAL INVESTMENTS NEEDS BETWEEN 2016 & 2040:**  
**\$94 TRILLIONS**  
**19% HIGHER THAT THE CURRENT TREND**  
**3,5% OF WORLD GDP**

## SESSION : “ ALL IN “ - PLENARY MEETING

**GIANT** | HIGH LEVEL FORUM  
Leading Innovation Ecosystems

**ALL THE ISSUES ADDRESSED BY SOFT INFRASTRUCTURES CONTRIBUTE TO SMART CITIES**  
*(policy, legal, regulatory, financial institutions, collaboration, get user needs & dreams)*

**IN PARTICULAR POLICY, LEGAL & REGULATORY TOPICS  
ARE IMPORTANT AND OFTEN GO TOGETHER**

**MOREOVER AS ECOSYSTEMS, WE HAVE VERY LITTLE CONTROL ON POLICY, LEGAL & REGULATORY**

**HOWEVER, THEY CAN IMPACT HEAVILY ON INNOVATION & INFRASTRUCTURES PROJECTS**

**SOFT INFRASTRUCTURE IS ABOUT ALL OF THIS:**  
*short term / local / specialization*  
*long term / global / specialization*  
*discovery / agility / informal*  
*already established network / proximity / structured*  
*screening / scouting / out of the box*

**AND SOFT INFRASTRUCTURE IS ABOVE EVERYTHING**  
**“PEOPLE INFRASTRUCTURE”**  
=  
*Mixing people, cultures, talents, mindsets...*

**THINK AND ACT AT THE RIGHT SCALE !  
EACH TERRITORY IS DIFFERENT...**

**SOMETIMES SMALL IS BEAUTIFUL**

***SMALLER SCALE CAN MEAN  
smaller risks  
less regulatory constraints  
rapid experimentation***

...

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on**



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# A REMINDER OF OUR STRATEGIES / AMBITIONS

## 1. Domain Leadership

### Description

An innovation ecosystem has the ambition, critical mass & technical capabilities to become a national (international) leader in a field relating to infrastructure or innovation, uniting the various ecosystem players and championing the region at the national/international level.

### Examples

- Smart manufacturing (industry 4.0)
- Pioneering a hydrogen economy
- Smart cities
- Microelectronics

## 2. Environmental Test-bed

### Description

For geographic, historic or other reasons, a region has particular characteristics that make it suited to become a testbed for a new type of infrastructure.

### Examples

- A center for new wind infrastructure.
- A pioneer for the deployment of advanced traffic management.

## 3. Niche Technical Leadership from Infrastructure

### Description

An ecosystem has a particular technical specialty that might be for historical reasons, or linked to a particular infrastructure (a large instrument). All that's needed is to exploit this specialty to the maximum

### Examples

- High energy physics, high resolution microscopes
- The most powerful laser on the planet.

## 4. Start-up City

### Description

With an attractive campus, a young student population, and the willingness to experiment, the ecosystem goes all out to develop the soft infrastructures necessary to be recognized as the place-to-be for startups.

### Examples

- Think of a city: Boston, Shenzhen, Bangalore, Berlin.....

## SESSION : “ ALL IN “ - PLENARY MEETING

**All the strategies/ambitions resonated with the groups**

**But in reality, real-life strategies of ecosystems are often a mixture of the four; for a particular sector, hybrid strategies may be needed**

**For example, in some sectors creating a favorable environment for testing, combined with technical excellence can create real local/regional leadership**

***In many cases, there are political drivers, trends such as the move to digital and the need to collaborate that are key***

**WE ARE ALL DIFFERENT**

**No two ecosystems will develop their ambitions or strategies in the same way**

**For example, young ecosystems may first try to harness the talent of their students (or perhaps a niche tech/local differentiator); leadership may be more difficult depending on the field**



**THE IMPORTANCE OF THE PRIVATE SECTOR**

**In some sectors or deep technology fields, ANCHOR companies may be needed to strive or maintain leadership in a domain**

**The strong “pull-through” of larger companies can also be important for startups looking for routes to commercialization**

**WE NEED TO BE CAREFUL NOT TO BE TECHNOLOGY DRIVEN**

**Strategies may be developed both top down and bottom-up from a technology perspective, but we must remember the needs of users and the risk of having strategies disconnected from our citizens**

**We need to keep in mind, and ultimately harness, the leapfrogging strategies of other actors/companies: companies like Uber who think customer (value proposition) first and technology second, but whose strategies can dramatically affect tomorrow's smart cities**

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on**



**CHALLENGES OF  
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**AMBITION, IMPLICATION AND ROLE  
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**BEST PRACTICES  
& LESSONS LEARNT**

**CONCENTRATE INNOVATION IN A DISTRICT OR IN A CAMPUS  
AND FAVOR CROSS DISCIPLINARY FERTILIZATION  
AND MEETING BETWEEN VARIOUS PLAYERS**

**ENSURING THE DIVERSITY OF TALENTS & PROFILES**

**WELCOME A VARIETY OF CULTURES, ORIGINS, BACKGROUNDS,  
INDUSTRIES, TEACHERS, WORKERS, STUDENTS...**

**ALWAYS KEEP A VISION IN MIND  
- YOUR VISION, NOT A FASHIONABLE ONE -**

*Who we are ?*

*What can we offer ?*

*Where do we come from ?*

*Where do we want to go ?*

**EXPLAIN YOUR VISION !  
CONNECT TECHNOLOGIES TO SOCIETY TO DEMONSTRATE THE  
BENEFITS**

*As ecosystems, we are not good storytellers...*

**CREATION IS A CHALLENGE, DEVELOPMENT IS ANOTHER ONE!**

*If you are focused on start ups, do not forget the stickiness challenge  
Not everyone is focused on start ups, SMEs are often the most  
important components of a territory economy*



**ECOSYSTEMS ARE COMPLEX NETWORKS**

**IT'S OFTEN FUZZY SO YOU NEED TO MAKE IT CLEAR : WHO ARE THE PLAYERS INVOLVED, WHAT ARE THEIR RESPECTIVE ROLES, WHAT ARE THEIR OBJECTIVES...?**

**WELL BALANCED RELATIONSHIPS ARE NEEDED, TAKE CARE NO TO BUILD “EGOSYSTEMS”**

### ➤ Questions & Comments from the Audience ?

- **About the outcomes of the workshops**
- **About the process of the workshops**

### ➤ Warm THANKS to the FACILITATORS of the WORKSHOPS

- **Sebastien GUINARD** GIANT - CEA, Designer, Moderator
- **Robert THOMAS** GIANT - CEA, Co-Designer, Moderator
- **Jean-Charles GUIBERT** GIANT - CEA, Moderator
- **Christine VACA** GIANT - Linksium, Moderator
- **Hervé RIBOT** GIANT - Minalogic, Moderator
- **Benoit BALMANA** Longueuil, Spokesperson
- **Francine PAPILLON** GIANT, Spokesperson
- **David ARGENTI** GIANT, Spokesperson

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