tmforum DIGITAL TRANSFORMATION WORLD
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Connected Citizens

The Smart City Accelerator

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CONNECTED CITIZENS

Smart City Accelerator

A platform designed for smart cities with open APIs which will allow the development of various applications to stimulate citizen engagement.

BearingPoint

globetom™ technology for business agility

Cognizant

MÉTROPOLE NICE CÔTE D'AZUR

SAINT QUENTIN

CABA™ Continental Automated Buildings Association

NTT

orange™

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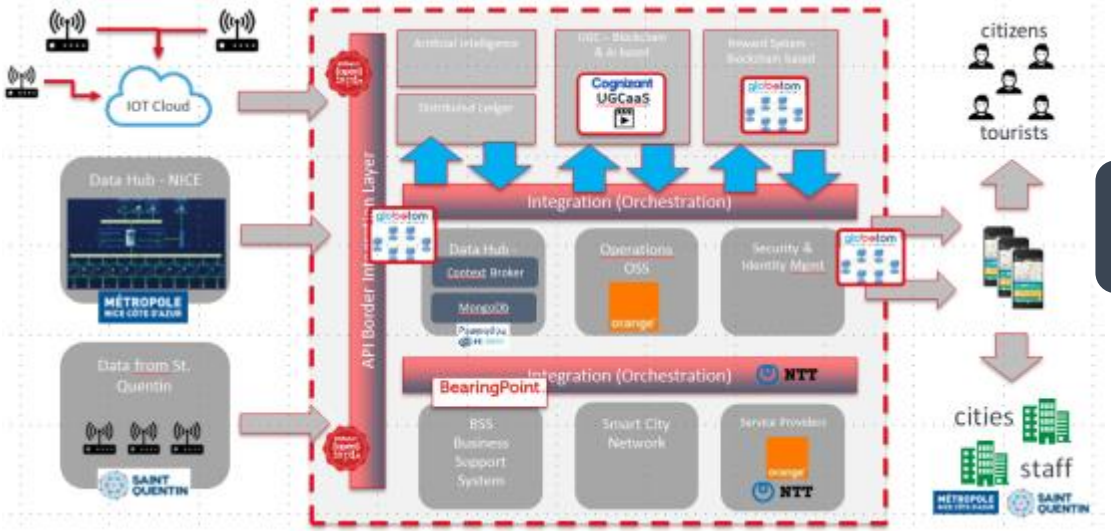
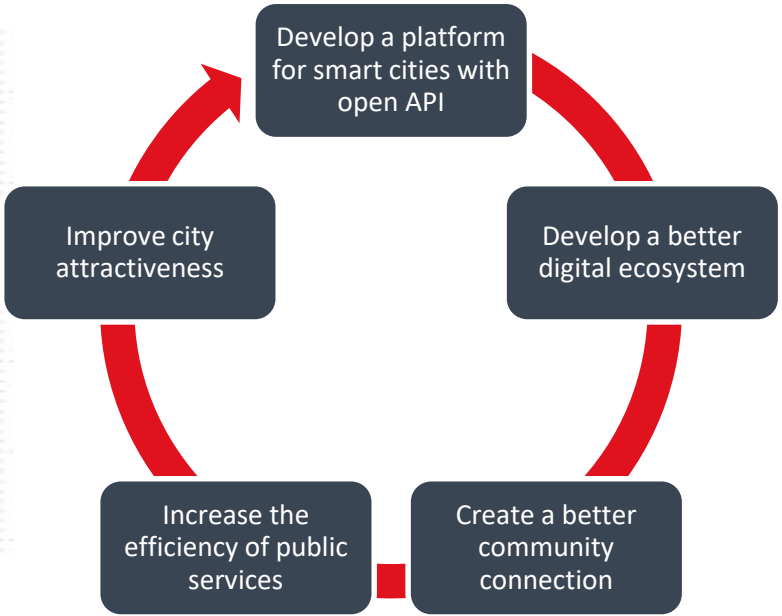
“A unique platform encompassing all technical components required to answer to all city challenges and use cases”





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Value and business models

The Key Questions

- Who will pay for any smart city solution, implementation, setup and run ?
- How can we generate revenue ?
- Who pays who ?
- What is the good/best value chain ?
- Is data a good money ?

How to monetize?

- Efficiency, cost cutting
- Value addition
- New revenue generation

A complex ecosystem

- Public service
- Private sector
- Universities
- Associations

2017: survey on french projects

80% projects create 1 to 6 € per euro value

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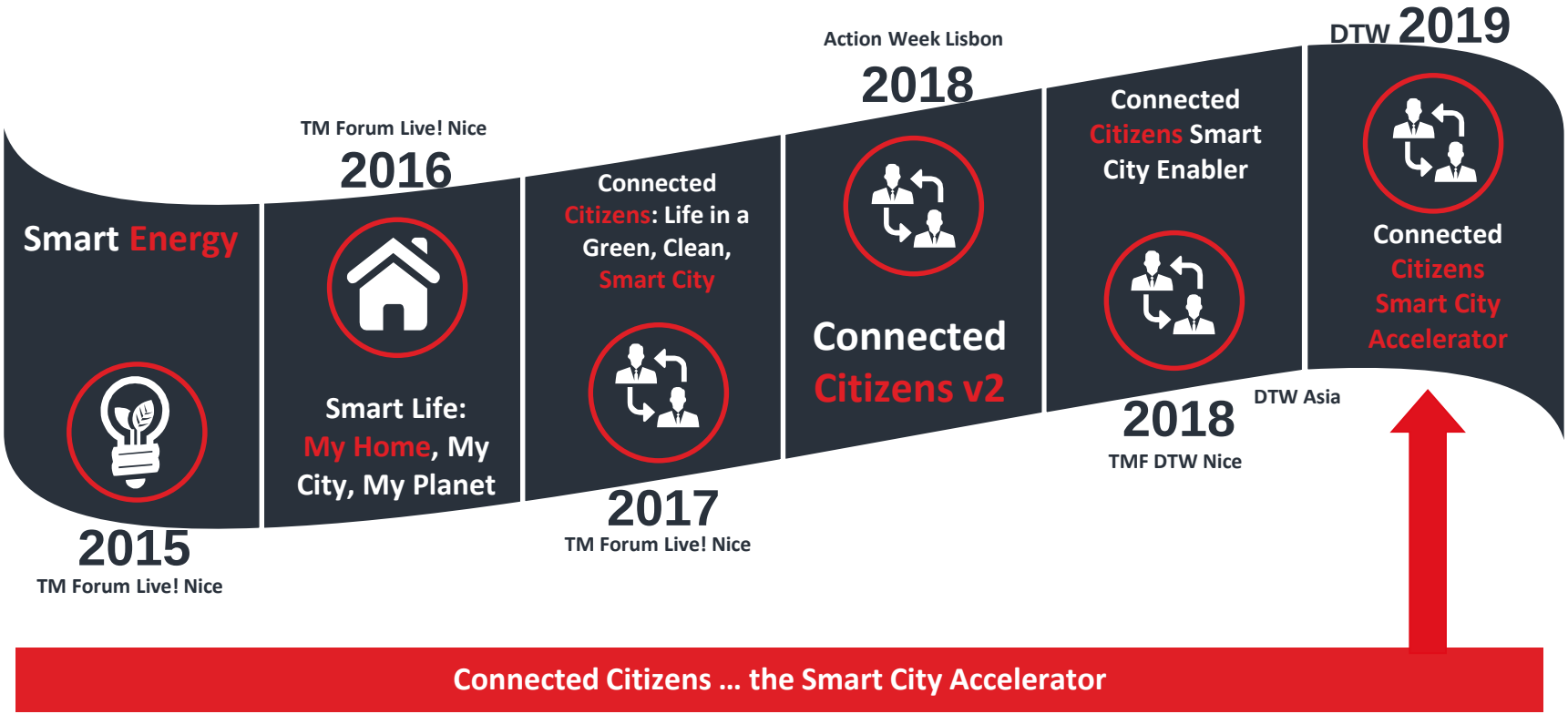
Catalyst History and Timeline



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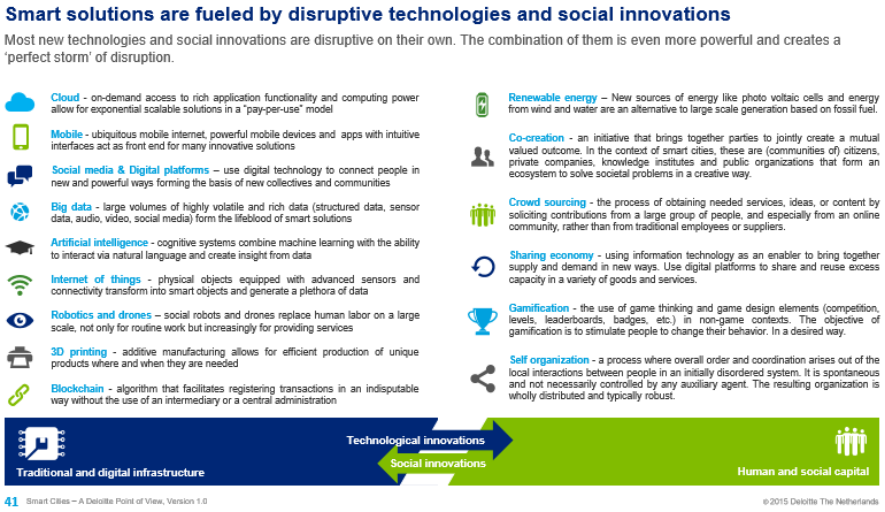
Our goals

The context

A long history of non converging solutions, a growing complexity with digital, an always bigger pressure on finance but the time is the good one now to start or restart on a smart city journey

- Cities are **facing a proliferation** of digital techniques and concepts to solve each of their concerns. There is very little convergence and synergy between these solutions. This is a reminder of what other areas may have encountered before any standardization**...like Telco in the 80's**
- With dozens of past and current experiences, cities have expressed their **great difficulty** in obtaining real levers to find tangible, scalable and sustainable results for their problems and especially for the interoperability of the solutions implemented.
- On top of this, Cities are today facing **problems to finance** these solutions with no efficient business models or revenue models, and are facing the digital wave without big levers to be embarked.

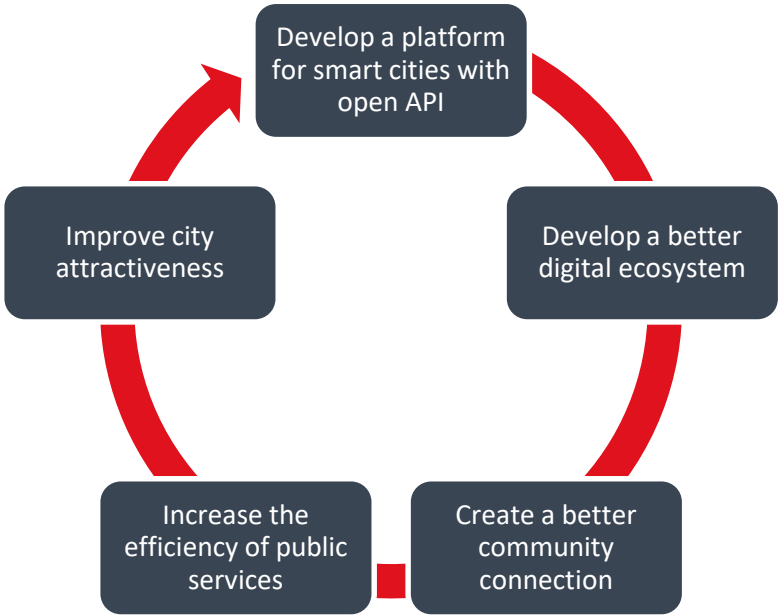


It is the good time : technology is here, mindset has changed, need is really here

The solution

A new mutualized, open digital platform at the center of a business ecosystem to answer the cities needs of today and tomorrow

***Connected Citizens* builds the draft for the global ecosystem for small and medium cities to develop their smart city capabilities. The platform aims to enable city stakeholders, such as developers, city agents, students and citizens to collaborate for the development of the smart city "context" as well as for large developers or integrator to produce scaled up horizontal solutions**



Our vision is not only to provide a platform but also to assist cities to become autonomous on the digital transformation. We will integrate an ecosystem vision with local public and private partners. They will be able to propose a valuable, efficient digital environment to develop their own ambition.

That ecosystem will enhance the public services efficiency, create a new dynamic of engagement of citizens. At the end of the loop the ambition is to attract new citizens, companies, students … to enable a more robust city with better funding capacities and a better image.

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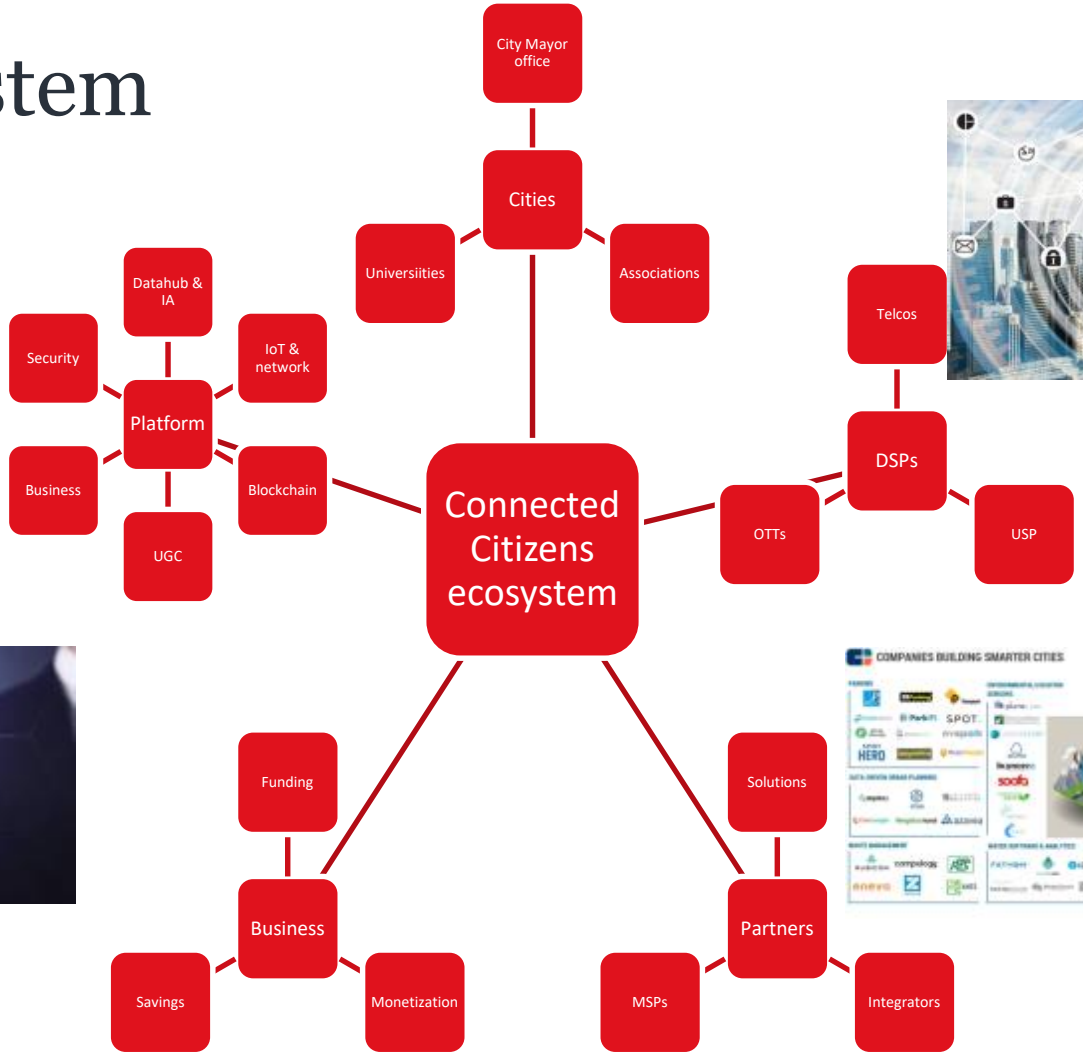
The ecosystem



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City Stories examples to validate the scenario

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City Stories

The weather forecast for the next few days heralds heavy rain. **Roger** needs to monitor river levels to prevent flood risk. To better manage the risks, he also needs to have information about upcoming events at the nearby auditorium.

Mike is an emergency service coordinator for New York City (NYC). Today there are high winds and he is concerned about impacts to emergency services teams, traffic and citizen safety.

Alexandre is responsible of green spaces of the city of Saint-Quentin. His concern is to use data to monitor the watering system of sport fields in order to optimize water consumption and tour of municipal staff.

Taka is responsible of ICT usage to solve the problems in the city of Sapporo. His concern is to make use of the data from IT to understand the tourist move and purchase behavior in order to encourage local business.

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Use Cases

User Generated Content with Blockchain

Third Party / Innovator Onboarding

Decision Making Based on IoT Events

Expose and Track Existing Data Through APIs

Smart City IoT Device and Event Management

Vertical Stretch from Smart City Through Platform

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Needs / CCC responses		Smart City	Smart Transportation	Smart Environment	Smart Education	Smart Factory	. . .
Technical	Smart City IoT Device & Event Management	Sustainable /Efficient /Attractive city	Parking Sharing	Saving Monitoring	Learning Teaching Certifying	Innovating Quality control	
Technical	Expose and Track Usage of Existing City Data through APIs						
Technical	Decision Making Based on data IOT Events						
Technical	Third-Party / Innovator Onboarding						
Technical	User Generated Content with Blockchain						
Operational	Onboarding Party & Provisioning						
Operational	Ordering & Activation						
Operational	Quality & Problem Mgt.						
Operational	Billing & Settlement						

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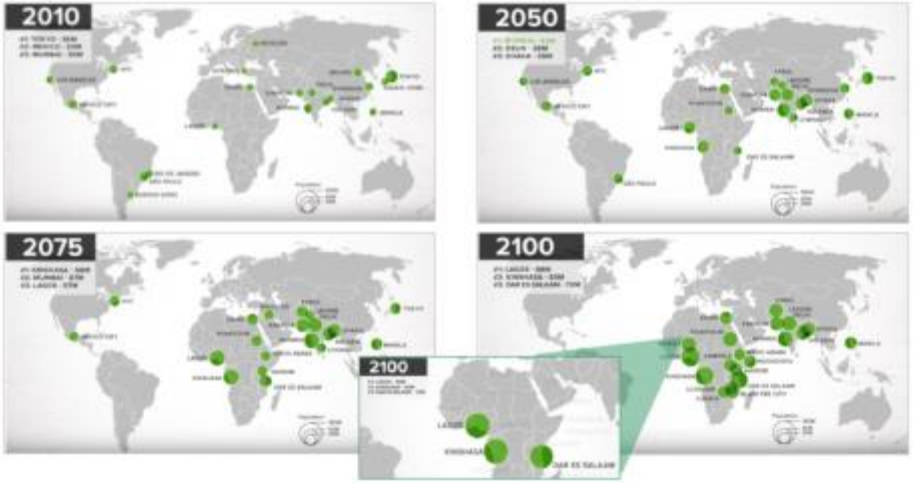
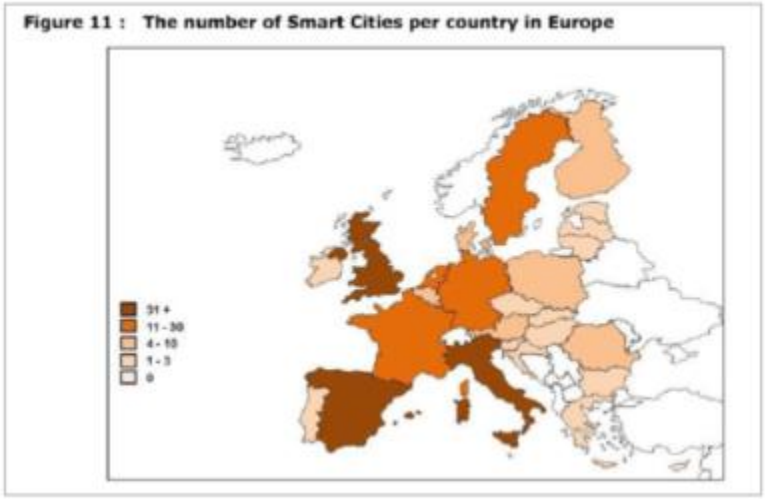
Business Models

World is changing … some cities will emerge, some will explode





North America topics

MidEast Asia topics

Europe Topics

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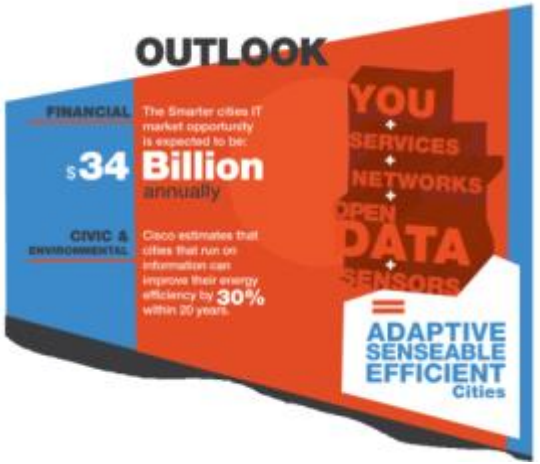
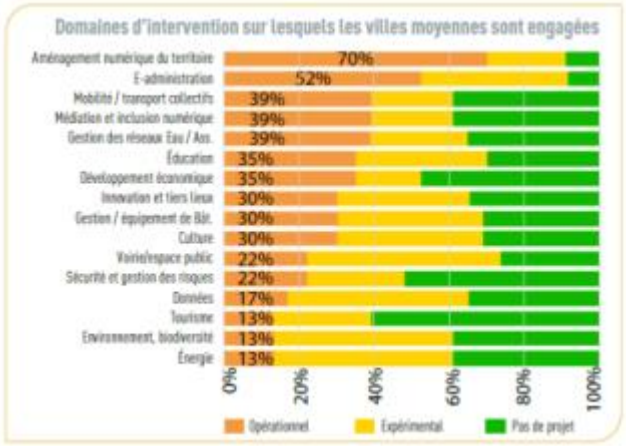
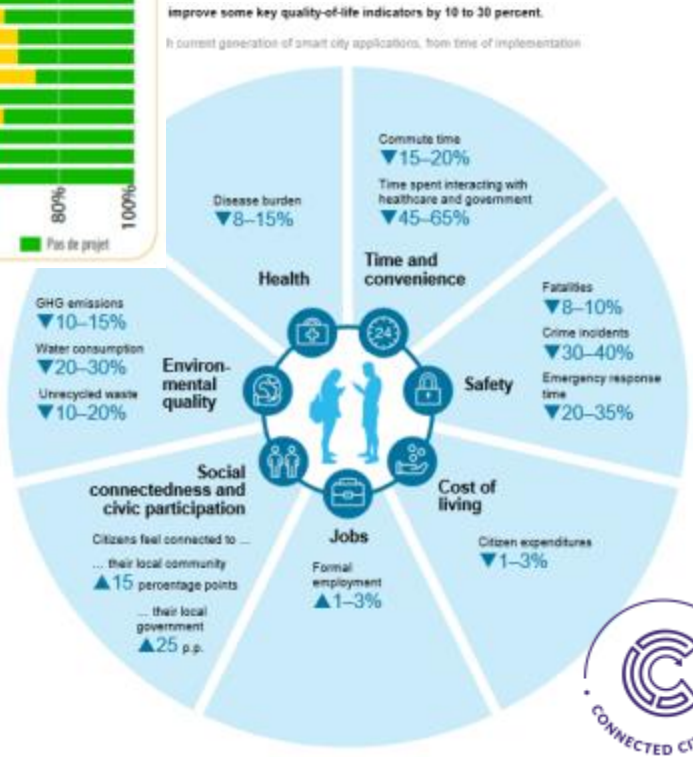
Smart City: A Big Market but …







Domain	Mobility	Waste	Building	eAdmin	Lights
Actor	CGI	Orange	Microsoft	Microsoft	Vinci
Cost	350 K€	7 M€	2 M€	70 K€	3 M€
Net Margin	20 M€	-4,2M€	3,7 M€	-360 K€	2,5 M€
SocioEco net Marg.	28 M€	30 M€	8,6 M€	160 K€	11 M€
Value for 1€	1,3€	4,83€	2,3 €	0,36 €	6,4 €

Compared to 1€/€ in road infrastructure

As a conclusion in business our Business Model Canvas

Key Partners

•Who are our key partners?
•Who are our key suppliers?
•Which key resources are we acquiring from partners?
•Which key activities do partners perform?

- Cognizant
- Globetom
- Bearing Point
- Orange
- NTT

Key Activities

•What key activities do our value propositions require?
•Our distribution channels?
•Customer Relationships?
•Revenues Streams?

- Onboarding (Citizen, Developer, City)
- Business operations of the platform

Key Resources

•What key resources do our value proposition require?
•Our distribution channels? Customer relationships?
•Revenue Streams?

- IoT Devices/Integration
- Data Lake
- Ops Dashboard
- UGC

Value Proposition

•What value to we deliver to the customer?
•Which one of our customer's problems are we helping to solve?
•What bundles of products and services are we offering to each customer segment?
•Which customer needs are we satisfying?

City

- Lower cost to standup & maintain a Smart City Portal
- Monetization of Video

Developers

- SDK for App Dev
- Data Sets for App Dev

Customer Relationships

•What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
•Which ones have we established?
•How are they integrated with the rest of our business model?
•How costly are they?

- TMForum CCC relationship with Cities
- City relationship with Citizens and Communities

Channels

•Through which channels do our customer segments want to be reached?
•How are we reaching them now?
•How are our channels integrated?
•Which ones work best?
•Which ones are most cost efficient?
•How are we integrating them with customer routines?

- Kiosk (Citizens)
- Smart Phones (Citizens)
- Smart City Portal (Dev)

Customer Segments

•For whom are we creating value?
•Who are the most important customers?

- Retail (Citizens)
- Enterprise
- SMB

Cost Structure

•What are the most important costs inherent in our business model?
•Which key resources are most expensive?
•Which key activities are most expensive?

- Portal Development & Maintenance
- Data Lake & Data Collection/Storage
- UGCaaS
- Licenses

Revenue Streams

•For what value are our customers readily willing to pay?
•For what do they currently pay?
•How are they currently paying?
•How would they prefer to pay?
•How much does each revenue stream contribute to overall revenues?

City

- Monetization of Citizen and/or IoT Video
- Advertising
- % of Developer App Rev

Developers

- Developers – App Sales

CCC Platform

- CCC – % of City Rev or Subscription (or Trans)

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Skynet

Borderless Remote Health Care: A Reality with 5G

Skynet primary objective

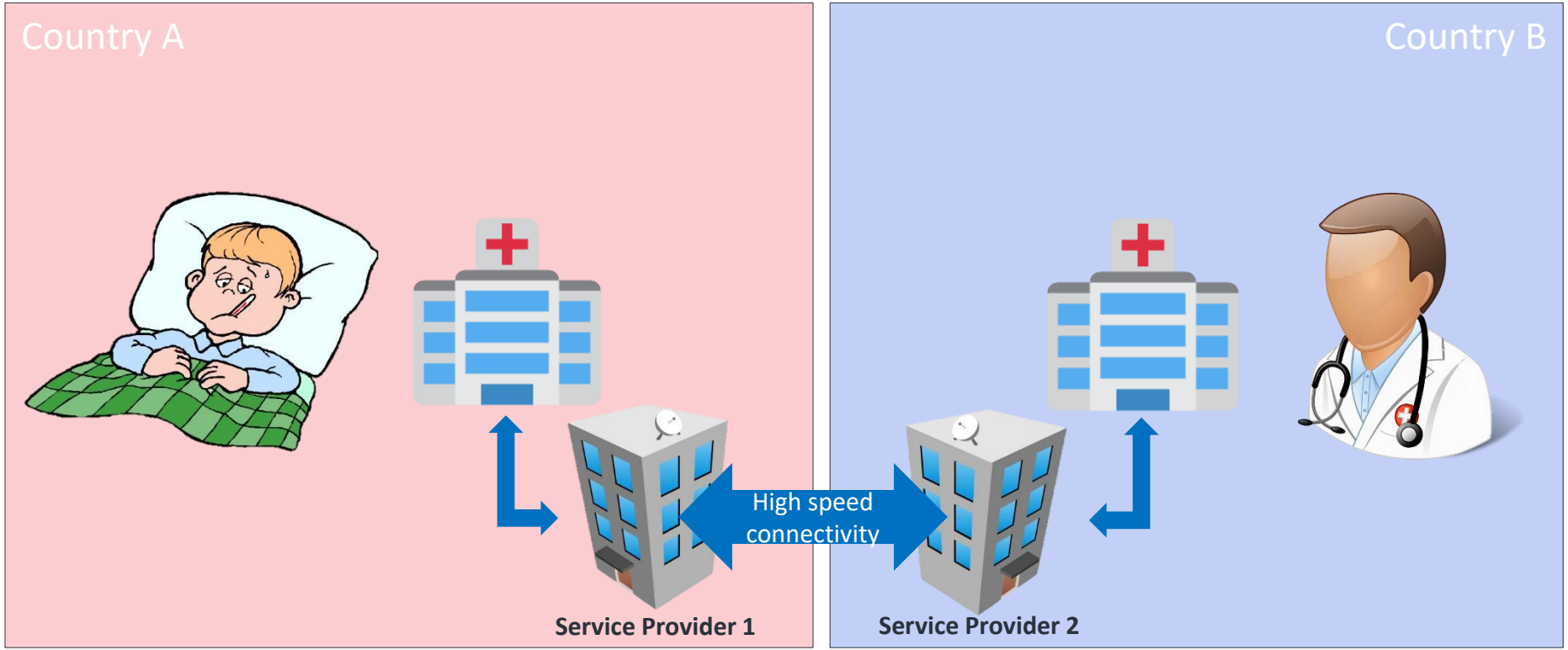
As recent history has proven, **epidemic outbreaks** are still happening frequently, even in well developed countries and **swift, coordinated handling is crucial:** pandemic influenza, bird flu, swine flu, Nipah and Ebola still have a global impact.

How telecoms can help the eHealth sector?

The Skynet model can ultimately enable an **unprecedented medical collaboration** around the globe.

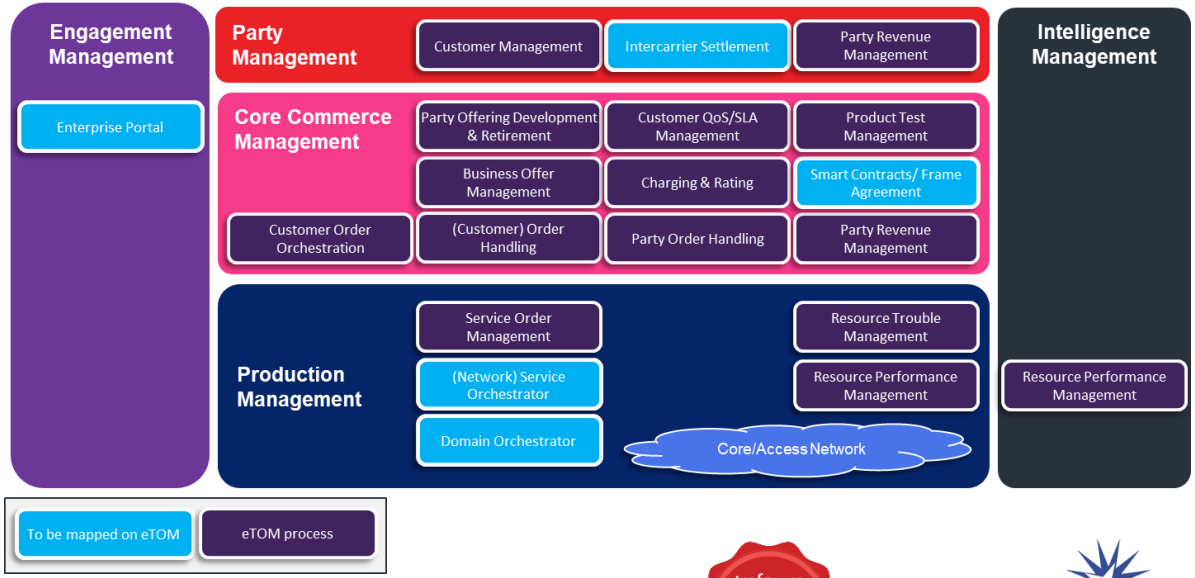
But what happens when they are in different locations?

And advanced connectivity for advanced medical services

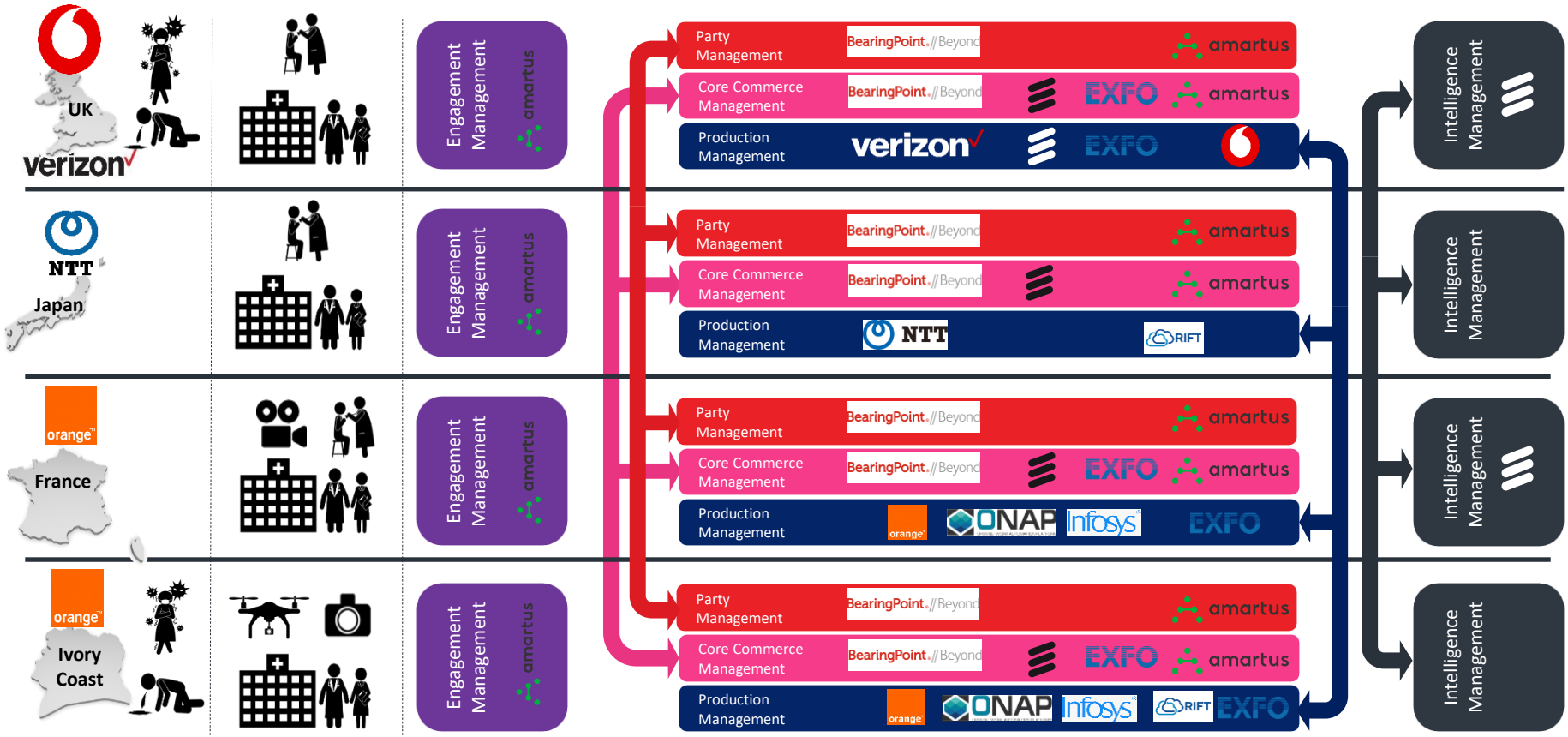


Industry standards

Industry standards are key as they enable collaboration and **easy(er) integration of new partners,** a mandatory requirement to enable a worldwide health platform collaboration**.**

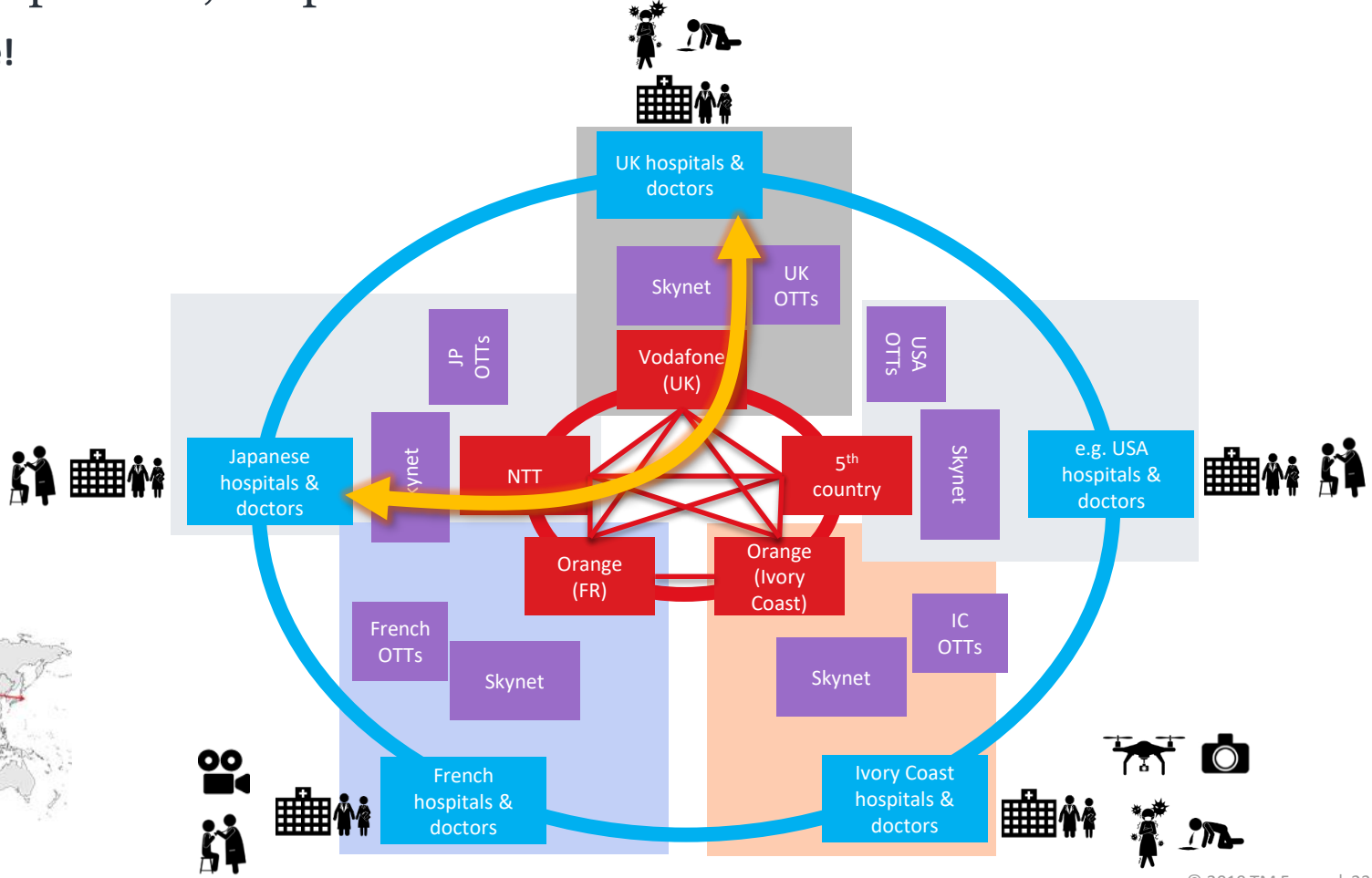


High level ODA Skynet intercarrier architecture and applications



Skynet enables patients, hospitals and doctors to communicate

Wherever they are!



11 Champions' and 6 vendors

Incredible collaboration for next generation eHealth!

Skynet Demos

Demo home

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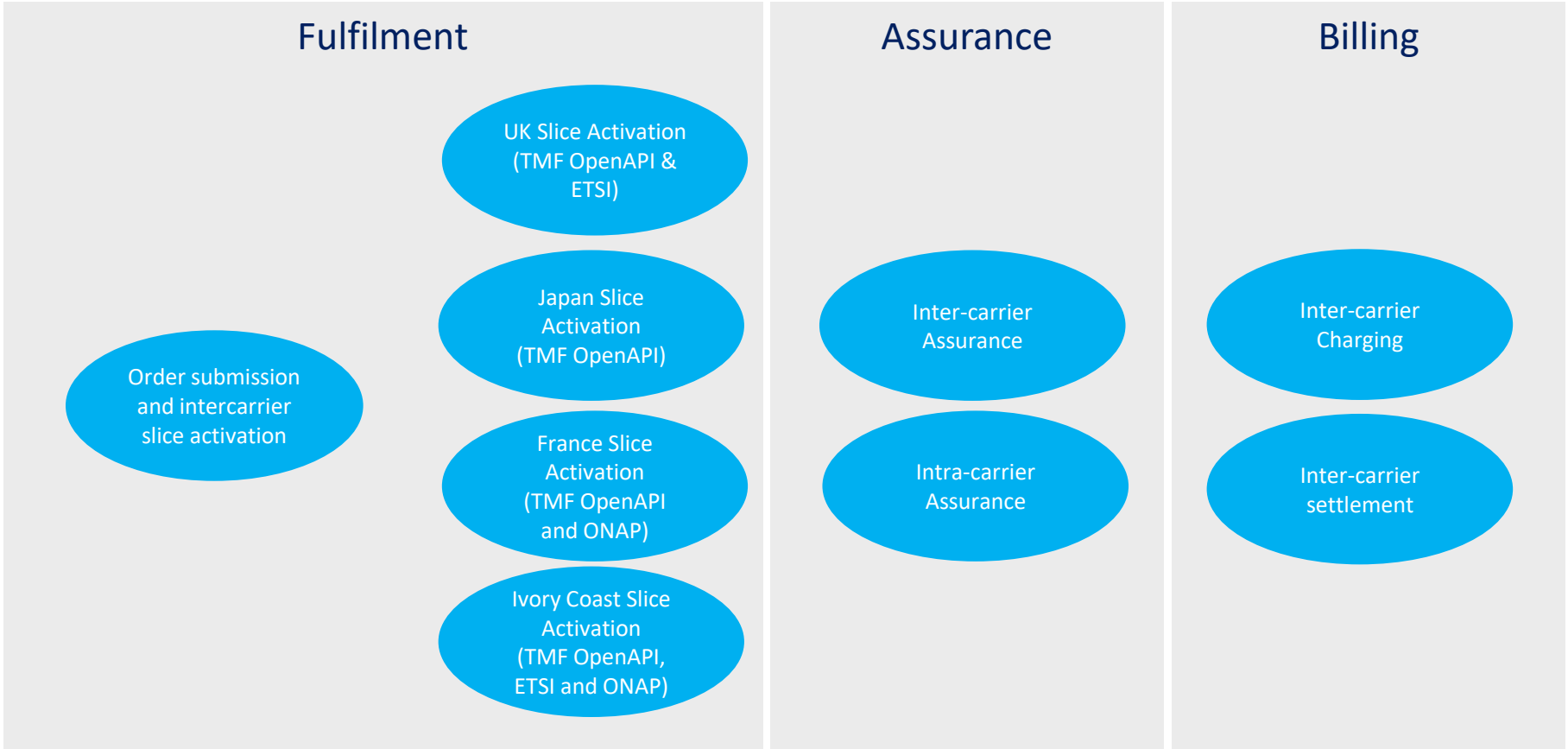
9 demos available!



Using 5G network slicing to provide new tools to save lives!

- The knowledge doctors need often is available far away from the location of need, making telecoms a central enablement component.
- Skynet is providing:
  - **On demand inter-carrier hybrid network slices orchestration** that go across operators & country borders.
  - **Inter-carrier Assurance**
  - **Inter-carrier Charging and Billing settlement**
  - **A powerful business model** to manage all the parties involved

- The solution set up can actually be used as a blueprint to address **every business vertical** that requires high performing network slices going across operators and geographies

Thank you!