



CIDADES INTELIGENTES CIDADES DO FUTURO

Paulo Soeiro de Carvalho

Lisboa

2 Dezembro 2015

O QUE É UMA SMART CITY?

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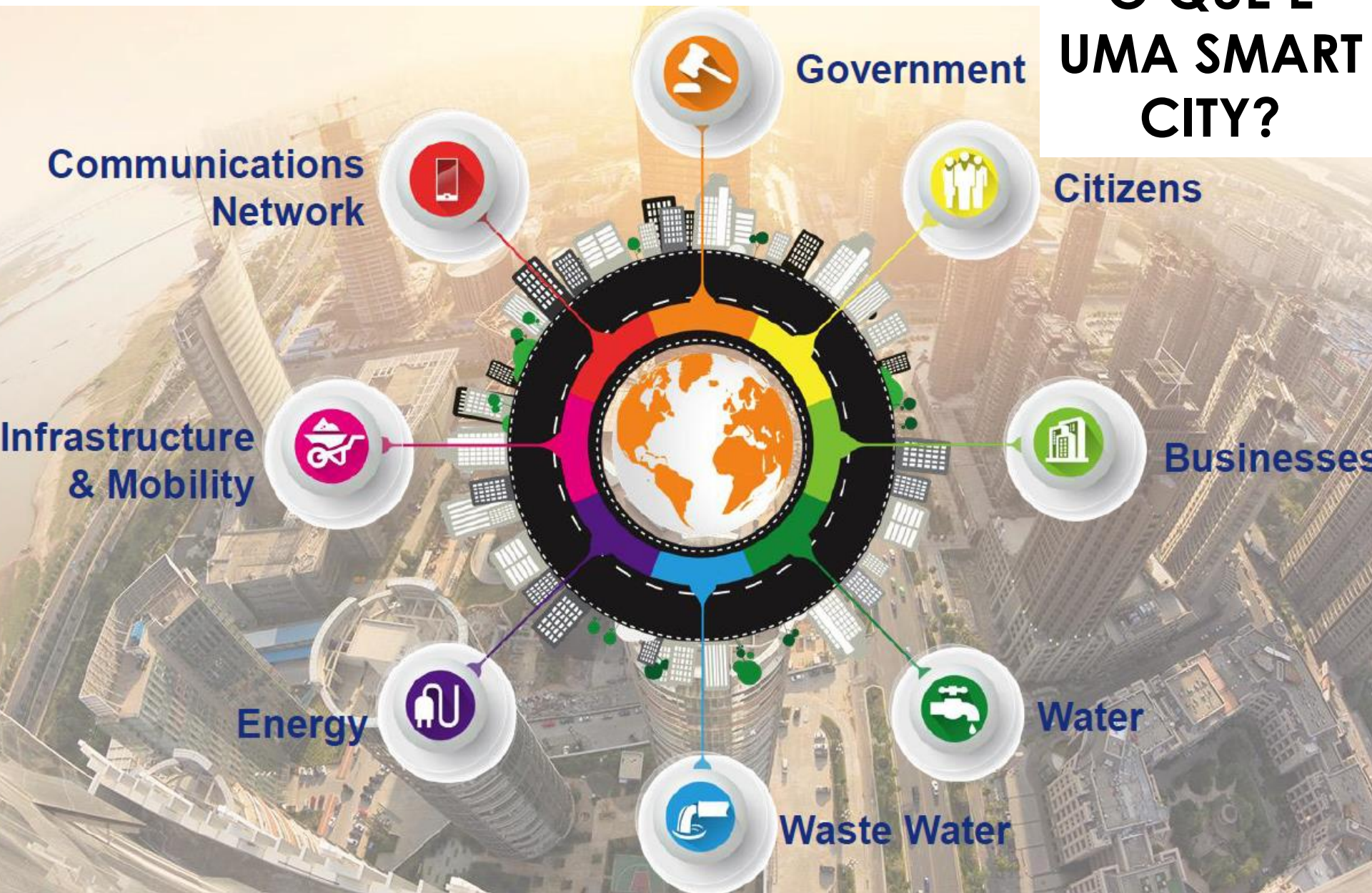
(Existem centenas de definições e estratégias)

A Smart City might be described as one that...

- *...dramatically increases the pace at which it improves its sustainability and resilience,*
- *...by fundamentally improving how it engages society, how it applies collaborative leadership methods, how it works across disciplines and city systems, and how it uses data and integrated technologies,*
- *...in order to transform services and quality of life for those in and involved with the city (residents, businesses, visitors)*

(ISO 'Working Definition', adoptada na *Lighthouse city proposal*)

O QUE É UMA SMART CITY?



UMA PROPOSTA DE ORGANIZAÇÃO DE PROJECTOS ESTRATÉGICOS

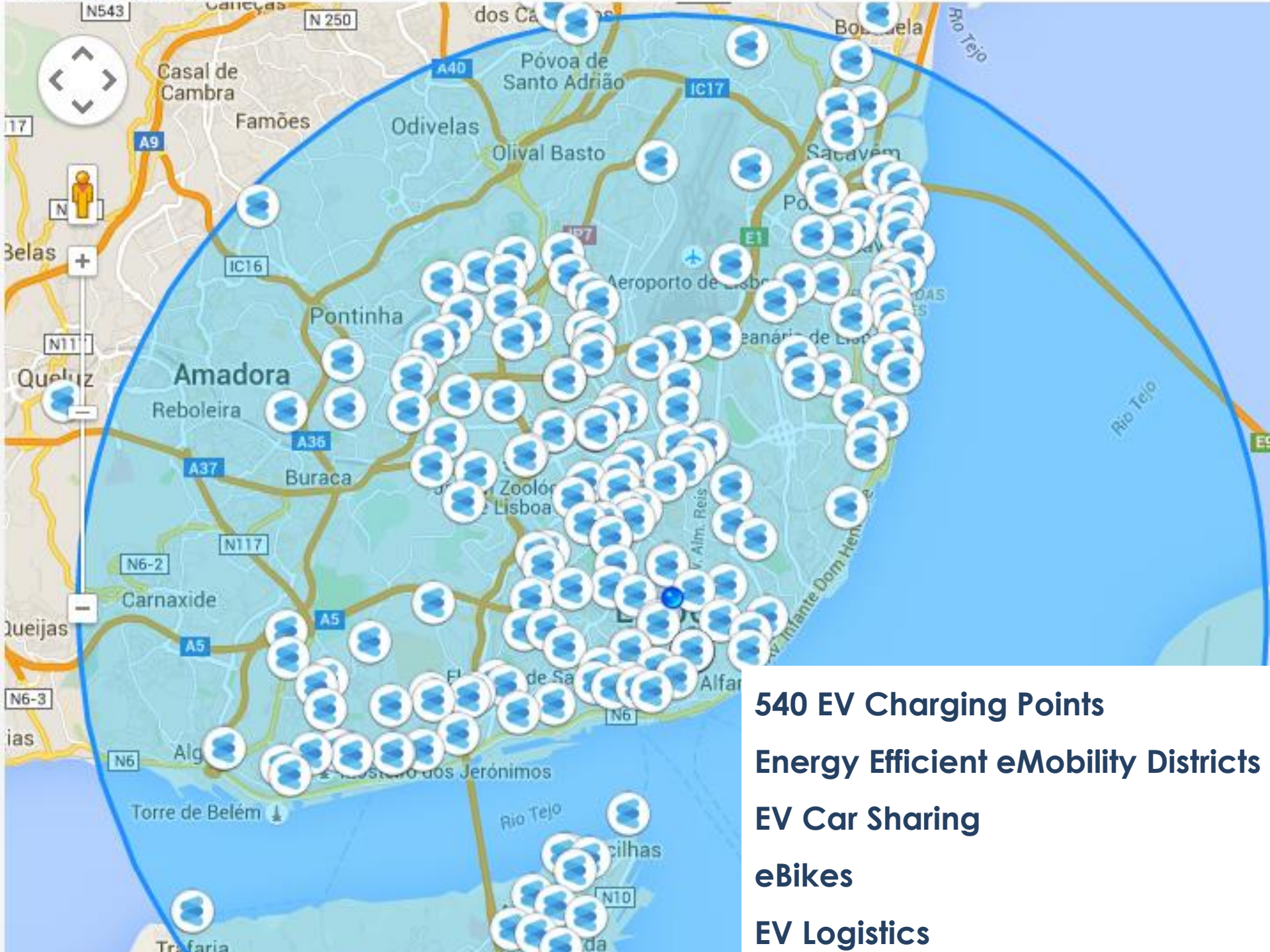


Big Data the “New Electricity” for Smart Cities

Big Data the "New Electricity" for Smart Cities

Where do adults taking the bus from Woodlands go to at 6 am on weekdays?





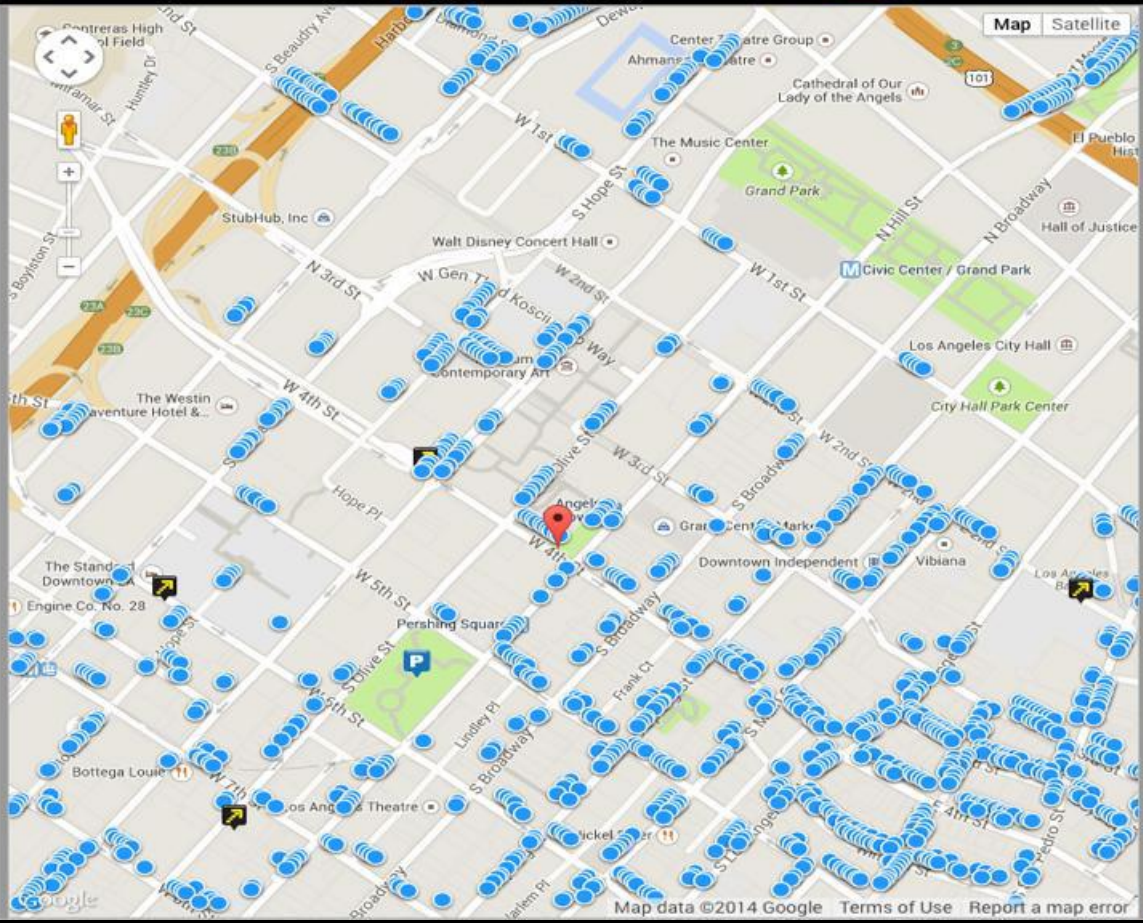
- 540 EV Charging Points**
- Energy Efficient eMobility Districts**
- EV Car Sharing**
- eBikes**
- EV Logistics**

Meter Activity

Location Search by address, intersection or landmark Search

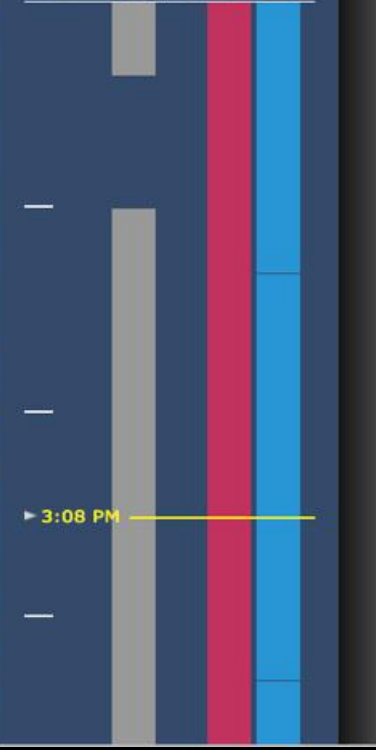
Meter Policy Work Asset Advanced Filters

Effective Time 10/28/2014 12:08 PM
Maximum Stay All
Rate All
Price range: \$0 - \$5.20



Parking Space: CB2817

Activities Details
10/28/2014 Now
12 AM Occu./Pa Main Polic







Police 警方

Utility
公共设施

Housing
住宅

Transport
交通

数据孤岛

DATA SILOS

Ecosystemas e Clusters

ECOSSISTEMA EMPREENDEDOR DE LISBOA

www.facebook.com/incubadoraslisboa



INCUBADORAS



ACELERADORES



COWORKS



FABLABS



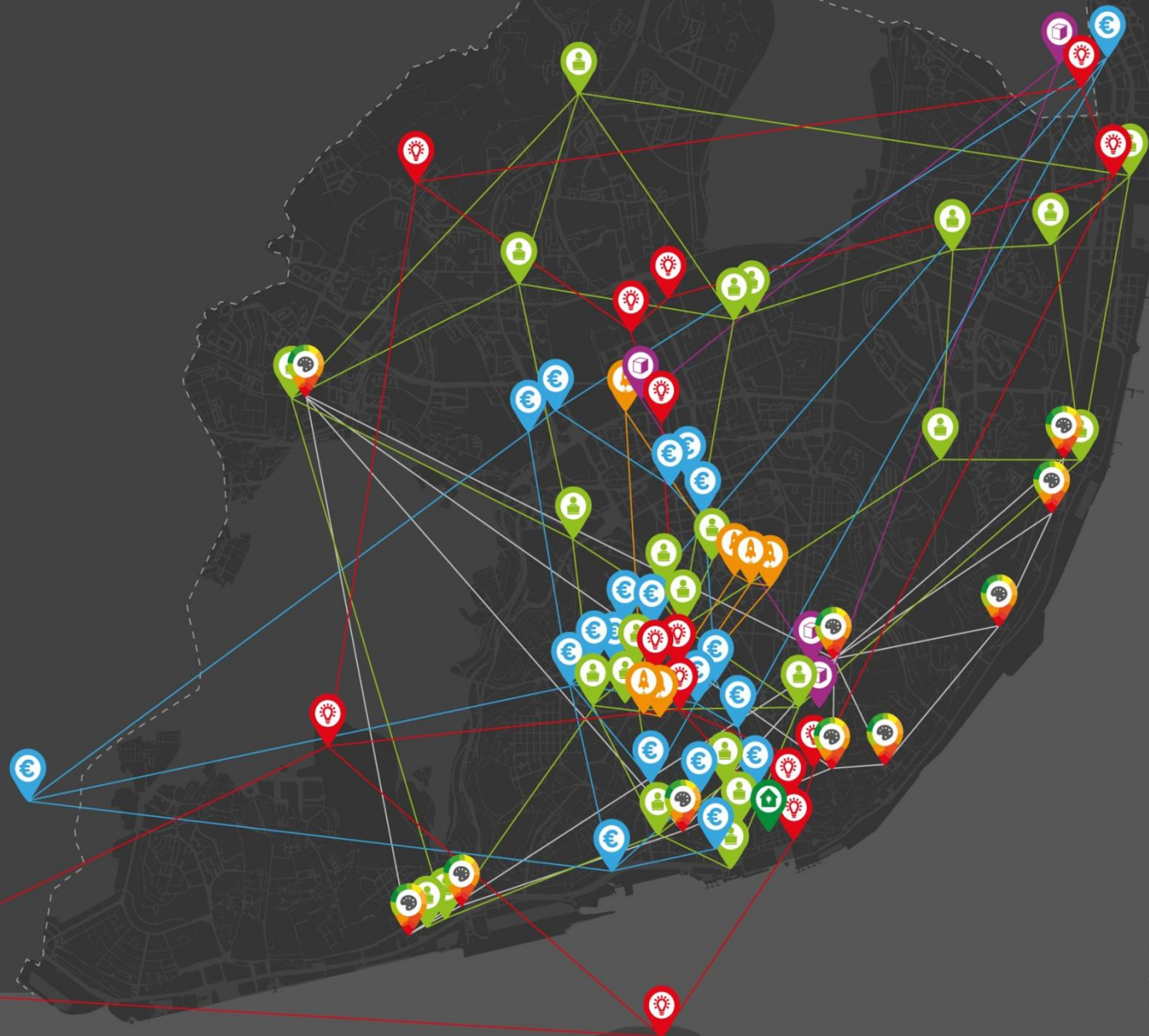
INVESTIDORES



HUBS CRIATIVOS



RESIDÊNCIAS



www.incubadoraslisboa.pt





Setting



Name civic1

Phone 00-000-0000

Email civic1@civic1.com

CPS Version 1.0

- ### List
- Handsome sinkhole on the road was not repaired for a long time.

2015-05-28


 - Greetings, scores of developers using heavy equipment owned by the road traffic euroyl decades. Even if the result is still new (the new G five lanes were damaged roads. For authorities of this. Thank you.

2015-05-27


 - The wood has deteriorated, putting the public at risk.

2015-05-27



Participate

Photo Camera

Category fallen tree

Location

Comment

textarea

Submit

Post > Location


road damage 2015-05-28



4, Lal Bahadur Shastri Marg

Post

road damage 2015-05-28



Handsome sinkhole on the road was not repaired for a long time.

View Location

‘I see Bristol as a laboratory for urban change.’

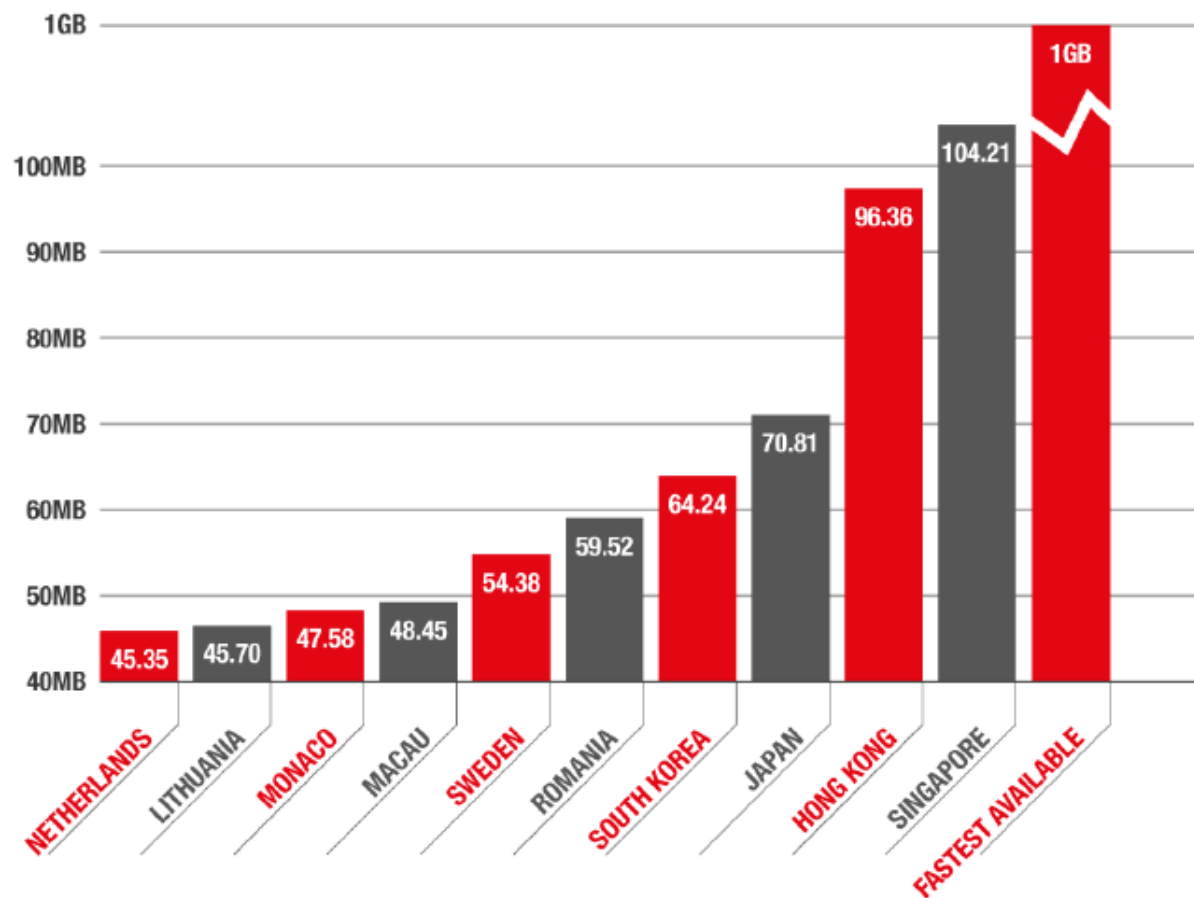
Mayor George Ferguson

BRISTOL OPEN



- We need: a massive amount of connectivity
- Flexible, programmable infrastructure for internet of things

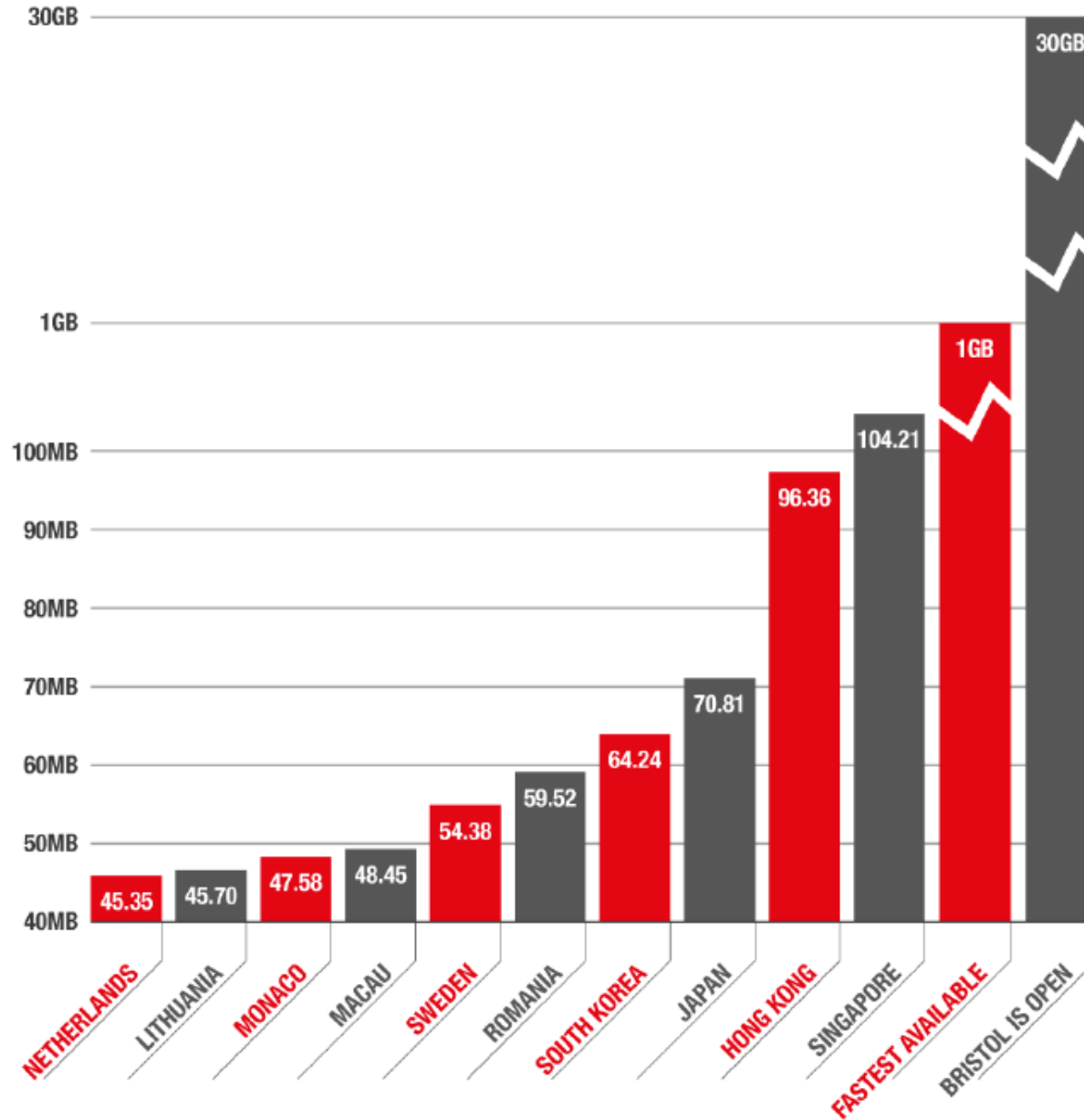
Fastest Consumer Connection Rate in the World



South Korea offers 1Gb connection rate to consumers

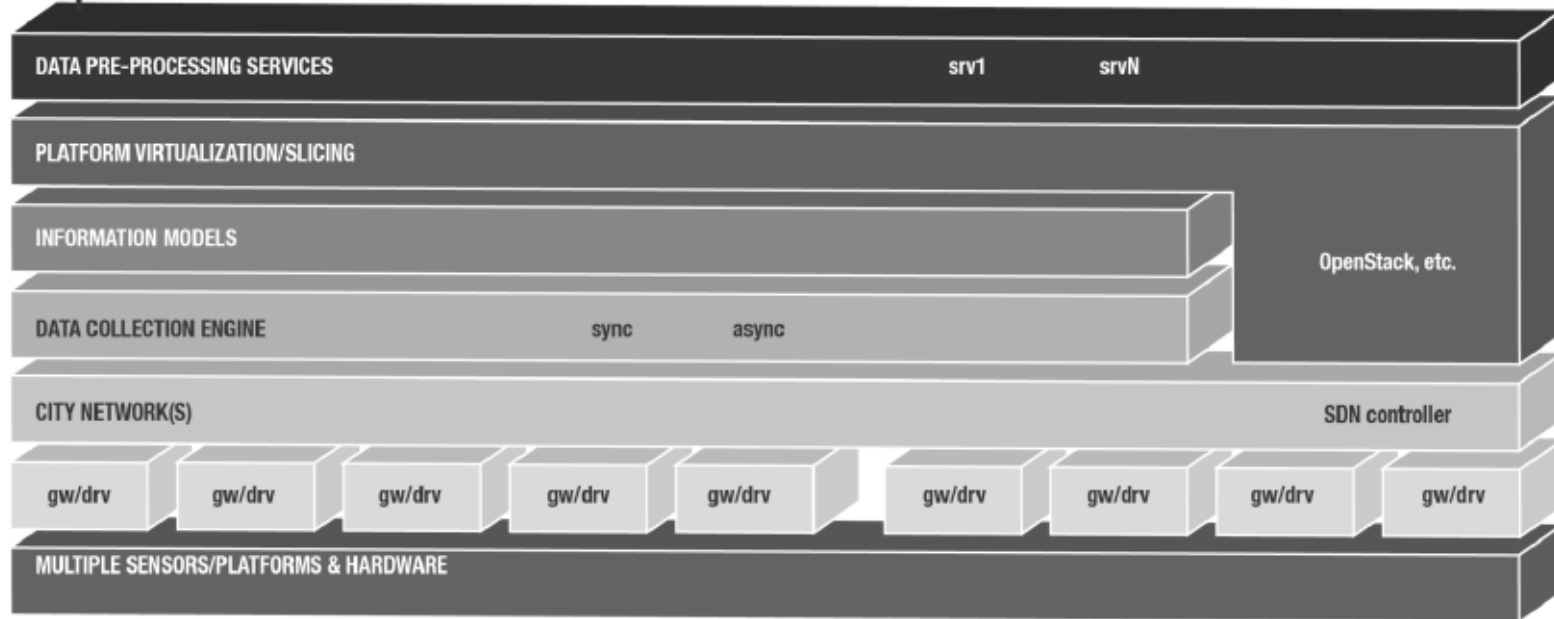
The fastest consumer rate in the UK is 152Mb

Connectivity for R&D partners



>30Gb/s of
connectivity
For Bristol Is
Open R&D
Partners

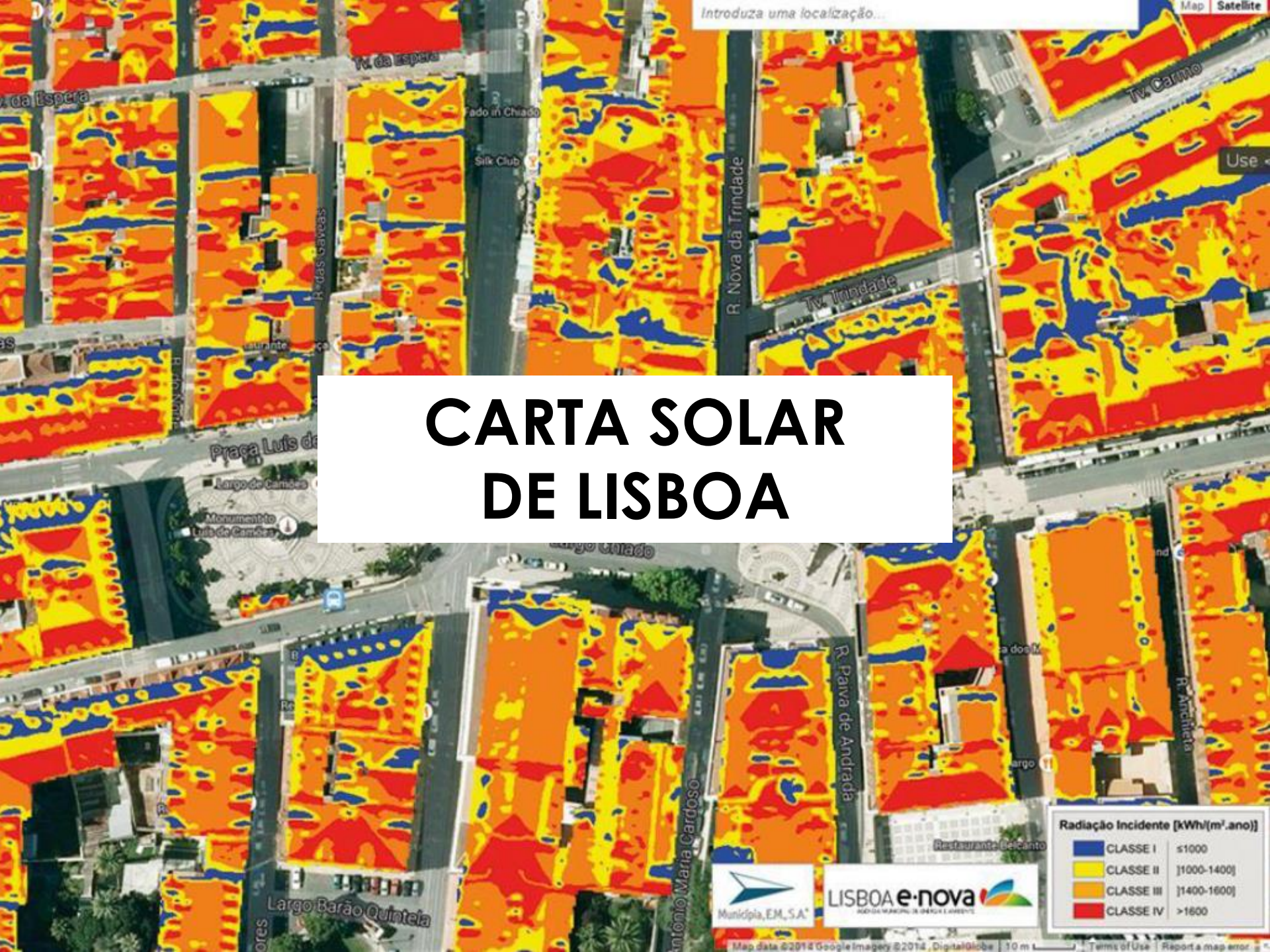
SOFTWARE DEFINED NETWORK CITY OPERATING SYSTEM



CityOS kernel
£15M PUBLIC RESEARCH FUNDS

Introduza uma localização...

Map Satellite



CARTA SOLAR DE LISBOA

Radiação Incidente [kWh/(m²·ano)]

CLASSE I	≤1000
CLASSE II	[1000-1400]
CLASSE III	[1400-1600]
CLASSE IV	>1600



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100



RESILIENT CITIES

ABOUT US


THE CHALLENGE

BLOG

CITIES

CITY RESILIENCE



GET UPDATES 

Helping [cities](#) around the world become more resilient to the physical, social, and economic [challenges](#) that are a growing part of the 21st century.



LISBON'S RESILIENCE CHALLENGE

Lisbon must overcome financial constraints as it integrates emergency response with proactive city planning.

Lisboa, Western Europe's oldest city, is a major economic center for both Portugal and the rest of the continent. However, many of the city's buildings are centuries old, and infrastructure is likewise aging. Though the city has strong technical expertise and political will to undertake upgrades, it also faces financial constraints from the global economic crisis. Urban improvement projects will be required to ensure residents have ongoing access to services, and to reduce the risk from seismic activity, which could cripple current structures and networks. The city is preparing for other threats—especially storms—by integrating response services to increase efficiency and effectiveness. But officials recognize that they have more work to do to plan effectively for larger, more severe events brought on by climate change.

RESILIENCE CHALLENGES

AGING INFRASTRUCTURE

DECLINING OR AGING
POPULATION

EARTHQUAKE

FLOODING (COASTAL
AND RAINFALL)

LANDSLIDE

RISING SEA LEVEL AND
COASTAL EROSION

Ambição, Estratégia e Governança das CIDADES do Futuro

A panoramic view of Paris at dusk, showing a dense urban landscape with numerous buildings and lit-up windows. The sky is a mix of blue and orange. The image is overlaid with several semi-transparent colored shapes: a yellow triangle in the top-left, a pink rectangle in the top-center, a yellow rectangle in the top-right, a cyan rectangle in the bottom-left, a purple triangle in the bottom-center, and a yellow rectangle in the bottom-right. The text is centered over the cityscape.

Paris
**INTELLIGENTE
ET DURABLE**
PERSPECTIVES 2020 ET AU-DELÀ



BCN Smart City



BCN SMART CITY

SMART CITY AREAS

PROJECTS

NEWS

Barcelona applies innovative solutions to managing its services and resources to improve citizens' quality of life





Smart Mobility



Smart Living



Smart Society



Smart Areas



Smart Economy



Big & Open Data



Infrastructure



Living Labs

connect

accelerate

strengthen





Smart Mobility



Smart Living



Smart Society



Smart Areas



Smart Economy



Big & Open Data



Infrastructure



Living Labs

Smart Mobility



Smart Living



Smart Society



Smart Areas



Smart Economy



Big & open data

Infrastructure
water / roads / energy / ICT



GREENEST CITY

2020 ACTION PLAN



DESAFIOS

- Uma **Visão Estratégica Ambiciosa**
- **Uma Forte Estrutura de Governança**
- Uma **Estratégia Integrada** com diferentes Horizontes temporais
- Áreas de maior inovação e crescimento futuro são **Holísticas/Convergentes** – As cidades necessitam de ultrapassar as estruturas de Silos, verticais e pesadas.
- **Confiança e Mobilização dos Cidadãos**
- **Contratação Pública e Resistência à Adopção de Novos Modelos de Negócio**
- **Regulação & Standards**
- Envolvimento e Confiança dos **Investidores e das Empresas**



Obrigado

Lisboa
2 Dezembro 2014