BARCELONA STRATEGY FOR CITY RESILIENCE

1. CONTROL ROOM
   - Improvement of processes and management
   - Improvement of the centre infrastructure

2. INTEGRATION OF CITY INFORMATION & MAPS
   - Phase 1: Creation of the information platform
   - Phase 2: Integration of city data and maps

OPERATIVE LINE

COMBINED LINE

STRATEGIC LINE

1. RESILIENCE & CLIMATE CHANGE ADAPTATION PLAN
   - Technical board of Resilience & Climate Change Adaptation plan

2. BARCELONA RESILIENT BOARD

2. INTERNATIONAL COOPERATION
   - Resilient cities Profiling Programme
   - Resilience Headquarters in Barcelona
   - www.urb.is.org

Collaborative map
- AGBAR
- ACBA-SORIGUE
- URBASER
- FCC
- CESPDA
- CIEMNE
- EIC
- INSTITUT CERDA
- ANTEVERTI
- INDRA

City protocol Society Rockefeller Foundation Infrarisk advisory Board

LEVERAGING TECHNOLOGY TO ENHANCE CITIE’S RESILIENCE
Enhancing synergies with resilience projects and tools currently under development:
(Situation Room, Resilience Boards working groups, International projects and networks (UNHabitat CRPP, C40, City Protocol Society,...)

LEVERAGING TECHNOLOGY TO ENHANCE CITY’S RESILIENCE
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Ajuntament de Barcelona

SITUATION ROOM
Integration of urban systems information
In the City DB

CityProtocol.org

STRUCTURE

Environment

Infrastructure

Public space

Nodes

INFORMATION

Information

CIVITAS

People

housing
industry
offices
shopping
economy
leisure
health
education
culture
sports
administration
security
SITUATION ROOM
Integration of urban networks information
In the City DB

LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
SITUATION ROOM
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SITUATION ROOM

Integration of urban networks information
In the City DB

URBAN NETWORKS /
MATTER CYCLE: PNEUMATIC COLLECTION OF SOLID WASTE

LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
SITUATION ROOM
Integration of urban networks information
In the City DB

LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
Integration of urban networks information in the City DB

Urban Networks / Energy: Gas and Fuel

Leveraging technology to enhance cities’ resilience
Integration of urban networks information
In the City DB
SITUATION ROOM

Integration of urban networks information
In the City DB

LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE

SITUATION ROOM

Control centres:

1. Sewer network (sub center)
2. Environment
3. Semaphores
4. Emergencies room
5. Air traffic control tower
6. Port control tower
7. ADIF
8. Rodalies (railway)
9. Rondes Dalt / Litoral
10. ATLL
11. CRC- ADIF line
12. FGC (railway)
13. Road information
14. Road control (Vic)
15. ENAGAS
16. CLH
17. Electricity network
18. Gas network (FENOSA)
19. Movistar (telecoms)
20. Tram Besòs (tram)
21. Bus traffic
22. Subway monitoring
23. AGBAR (water supply)
24. Trambaix (tram)
25. Electricity REE (Madrid)
26. CRC-ADIF (Madrid)
27. Sewer network (center)

Situation Room/
Integration of all city functional information

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Municipal control center
Public non-municipal control center
Private control center
Private control center
SITUATION ROOM

Concept:

- Allows an integrated governance of the city.
- Integrates and shares information serving the city.
SITUATION ROOM

Concept:
- Allows an integrated governance of the city.
- Integrates and shares information serving the city.
- Allows to have an overall vision improving decision making.

(SR does NOT command emergency situations)
(SR does not manage the incidences)
LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE

SITUATION ROOM

Atlas: Urban Platform
SITUATION ROOM

Objective:
General architecture

City Operation System

Interoperation interface with information sources

Support services for SmartCity business applications

SDK of external integrations

Analytics

City semantics

Processes

Security & events management

LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE

Objective:
General architecture

Support services for SmartCity business applications

Interoperation interface with information sources

City Operation System

Smart City Applications

SITUATION ROOM

CAMERA & SENSORS

City semantics

Security & events management

Processes

Analytics

SDK of external integrations

EXTERNAL CONTROL

iCITY

CITY OPEN APPS & DATA

TERRITORY BASE INFO
LEVERAGING TECHNOLOGY TO ENHANCE CITIES’ RESILIENCE
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