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‘Coviolo Wireless’

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1. Coviolo Wireless

Location/Objectives/Duration

2. Project framework

Smart City Strategy/Civic participation in Reggio Emilia

3. Project details

Actors/Infrastructure/Management

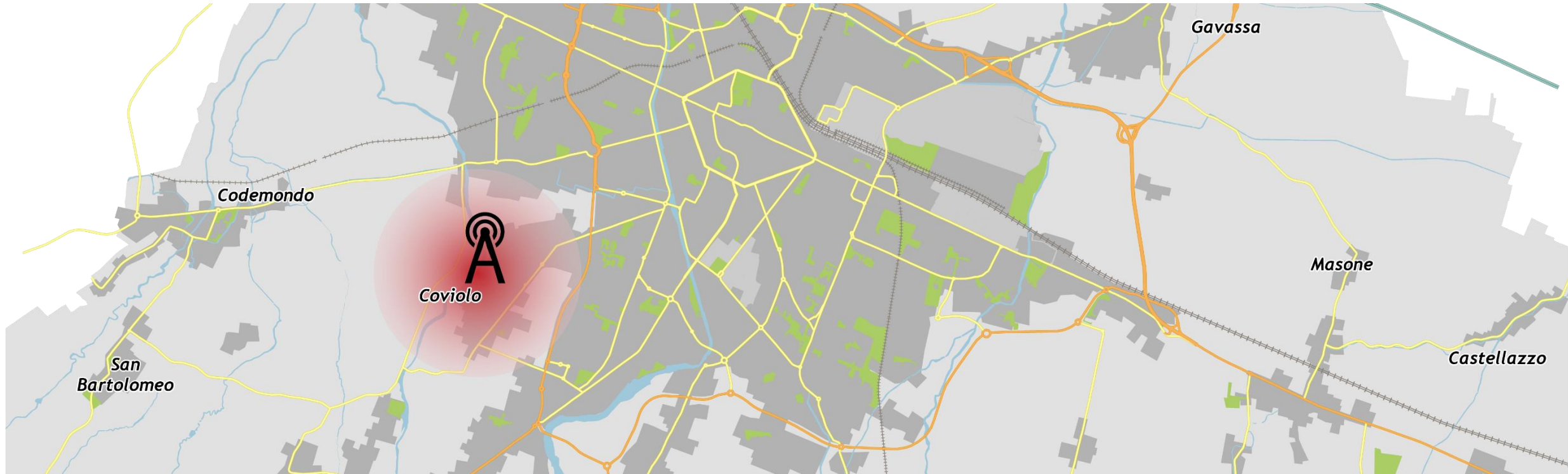
4. Tomorrow

Replicability/Future development

1. Coviolo Wireless



Reggio Emilia: Emilia Romagna Region/ Italy
172.000 inhabitants/ 27.000 people are involved in social cohesion activities



1. Coviolo Wireless



Location:

Coviolo/Reggio Emilia/Italy

Neighbourhood with 2468 inhabitants, located in a peri-urban area between the city of Reggio Emilia. Before the project implementation, the local community only had access to low speed ADSL Internet (2 to 5 mbps).

Objectives:

- reduce the digital divide through a broadband wireless infrastructure in a suburban area lacking market offers
- guarantee an affordable service cost
- participation and co-design smart solutions with the local community

2. Project framework



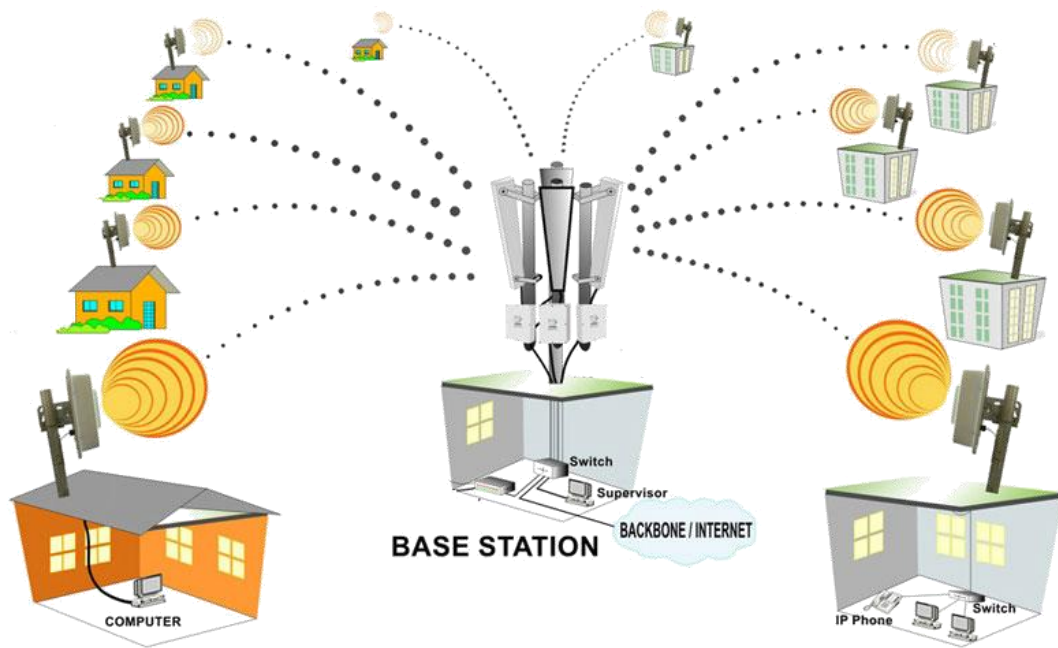
Smart City Strategy: 34 public/private partners

- Improving Digital Infrastructure
- Developing Digital Service
- Reducing Digital Divide

Civic Participation: 19 Neighbourhoods/120 projects

Reggio Emilia launched in 2015 the pilot experience called "Quartiere Bene Comune" which promotes public participation in every neighbourhood of the city to co-design open innovation projects such as Coviolo Wireless. These participatory processes are coordinated by public officials called 'neighborhood architects'

3. Project details



Infrastructure:

- Connect the main broadband hub from the center of Reggio Emilia towards Coviolo area (about 1.5 km from the NSC);
- Create a new hub as 'download site of radio connectivity' - 17 Ghz radio bridge- located about 1.5 km from the NSC of Coviolo which would become a radio reproduction site PMP;
- Installation and activation of radio link 5Ghz point-to-point for the connectivity of the NSC of Coviolo – as local base station - with the new local hub created by Lepida spa allowing Internet access up to 100 Mbps;
- Installation of 4 sector antennas connected to the reproduction site PMP located at the NSC (local base station) to extend wifi internet service to all the Coviolo area (10 square kilometers);
- Installation of CPE in the houses of the individual applicants who become members of the project by the membership to Coviolo NSC.

3. Project details



Partners details:

- NSC Coviolo

Neighbourhood social center (NSC) is a place, generally owned by the municipality which provides social, recreational, cultural activities to the members of local community through a public agreement.

Reggio Emilia has 29 NSCs which are a point of reference for the neighbourhoods of the city as a meeting place where socialize.

- Lepida SPA

Lepida SpA is inhouse company of Emilia Romagna Region participated by local authorities and managing a UBB network for public administrations.

Target: Cover all the public schools of Emilia Romagna Region with internet broadband by 2020.

- Municipality of Reggio Emilia

3. Project details



Management:

The project adopts a PPP model of financing.

The infrastructure was financed by the Municipality of Reggio Emilia with a total of EUR 10 000.

The implementation was entrusted to Lepida spa (with EUR 9 000).

The members of the NSC of Coviolo funded the cost of the installation of the local base station and the 4 sector antennas (EUR 14 582 in total).

The users are also shareholders of the Internet service.

They are members of the NSC of Coviolo which supports all management costs and keeps fees affordable.

The registration as member of NSC is open to all citizens with EUR 15 for a membership card and EUR 10 for monthly internet fee including the cost of maintenance of the property and damage insurance.

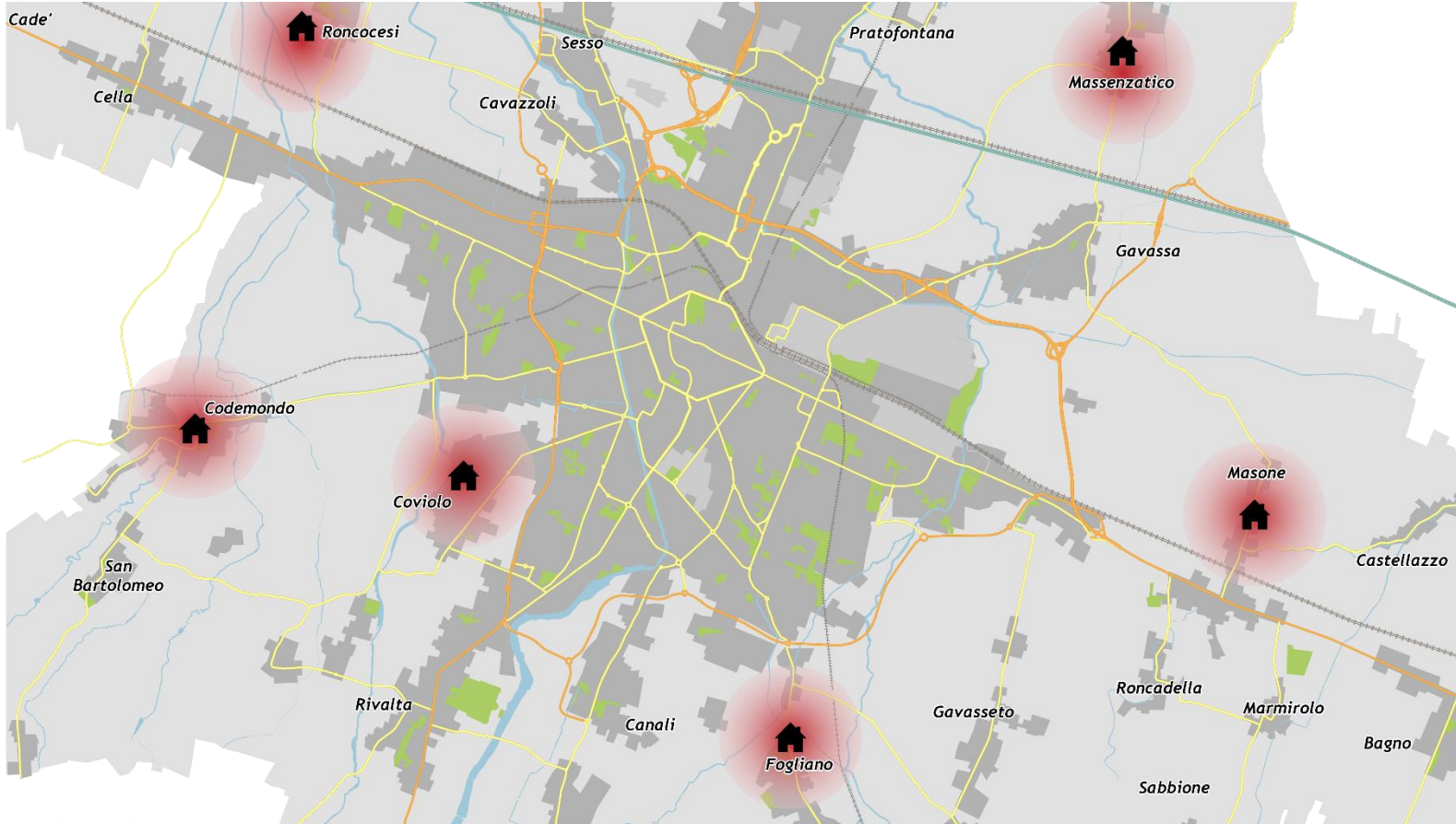
4. Tomorrow



Replicability:

The architecture model of the wifi-infrastructure gives a strong flexibility to the project which could be replicated in other rural and periurban areas.

This scenario is linked with the planning of more than 40 km of public fiber optics in Reggio Emilia.

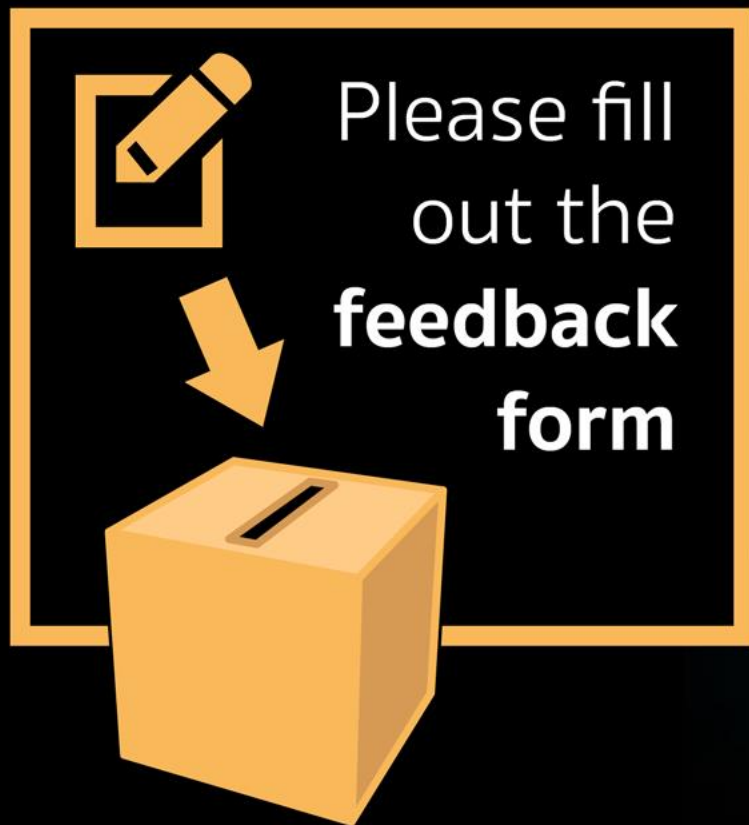


Future development:
Reggio Emilia has a
widespread network of
public buildings and
NSCs distributed in
many neighbourhoods of
the city.

In 5 NSCs, the Coviolo's
model will be reproduced
with the involvement of
1500 families

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