AIT-Rescue

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Agenda

1. Problem we worked on with the new rule
2. The strategy that we applied to address the problem.
3. A concrete example of our strategy.

Search for Civilians

Purpose

To assign the proper number of Ambulance Teams to every damaged civilian, in proper order.

Require

Ambulance Teams must effectively search for and rescue civilians.

It isn't easy to decide the search order

What Fire Brigade can do

	Ambulance Team	Fire Brigade
		
Rescue	○	○
Load	○	✕
Unload	○	✕

Searching based on Civilian Voices

Strategy overview

Civilian locations can guess from voice

→ Civilian’s HELP/OUCH notify by voice

→ Sender’s information inhere in voice

→ Candidate buildings are narrowed down

→ Priority search

Searching based on Civilian Voices

Strategy details

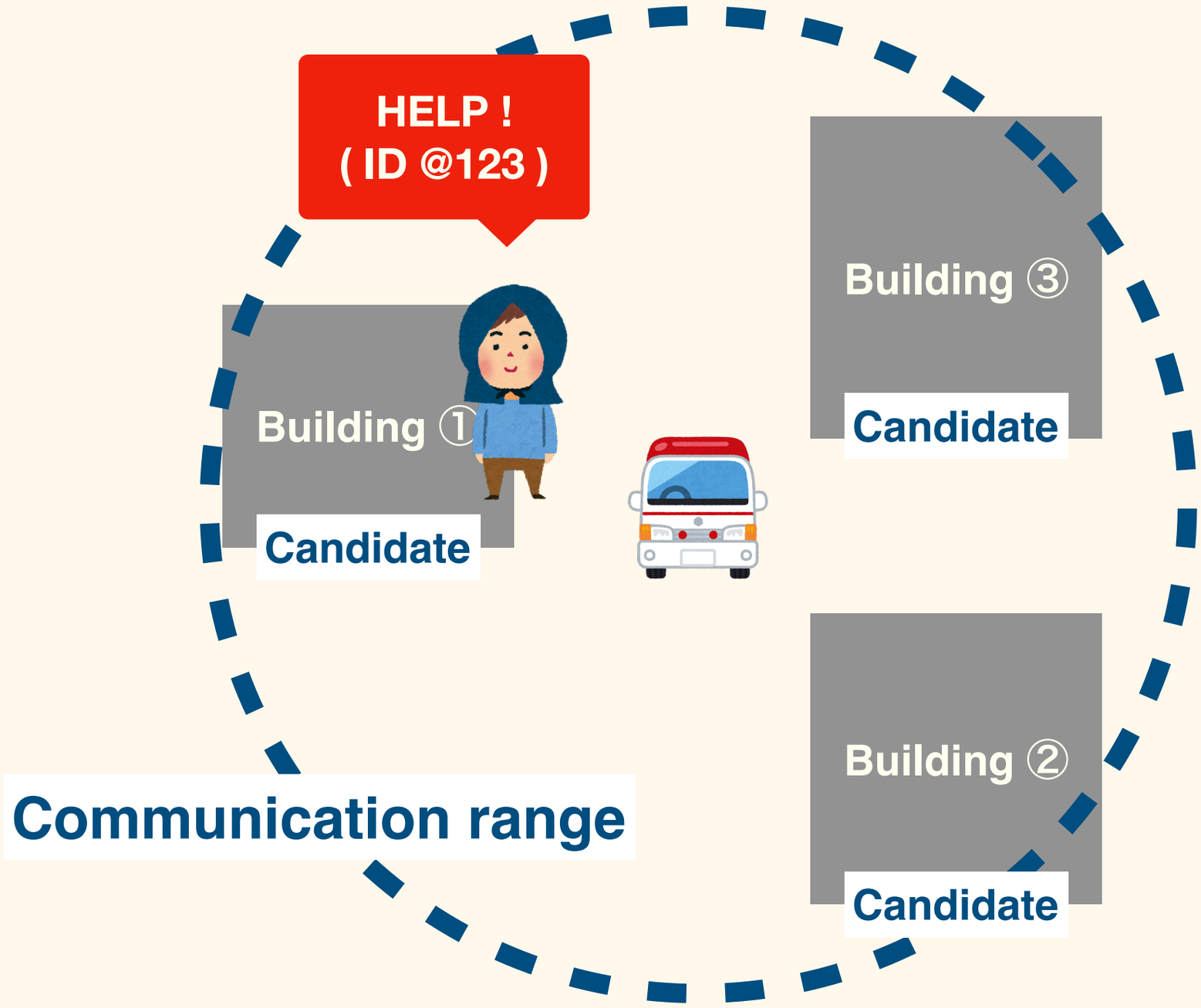
1. An Ambulance Team hears a voice crying for help.
2. It regards all buildings within the hearing range
   as the candidates for civilian saves.
3. The same civilian is heard again
   at a different position by the Ambulance Team.
4. The civilian candidate buildings are narrowed down.

Fire Brigade only use *Rescue* command

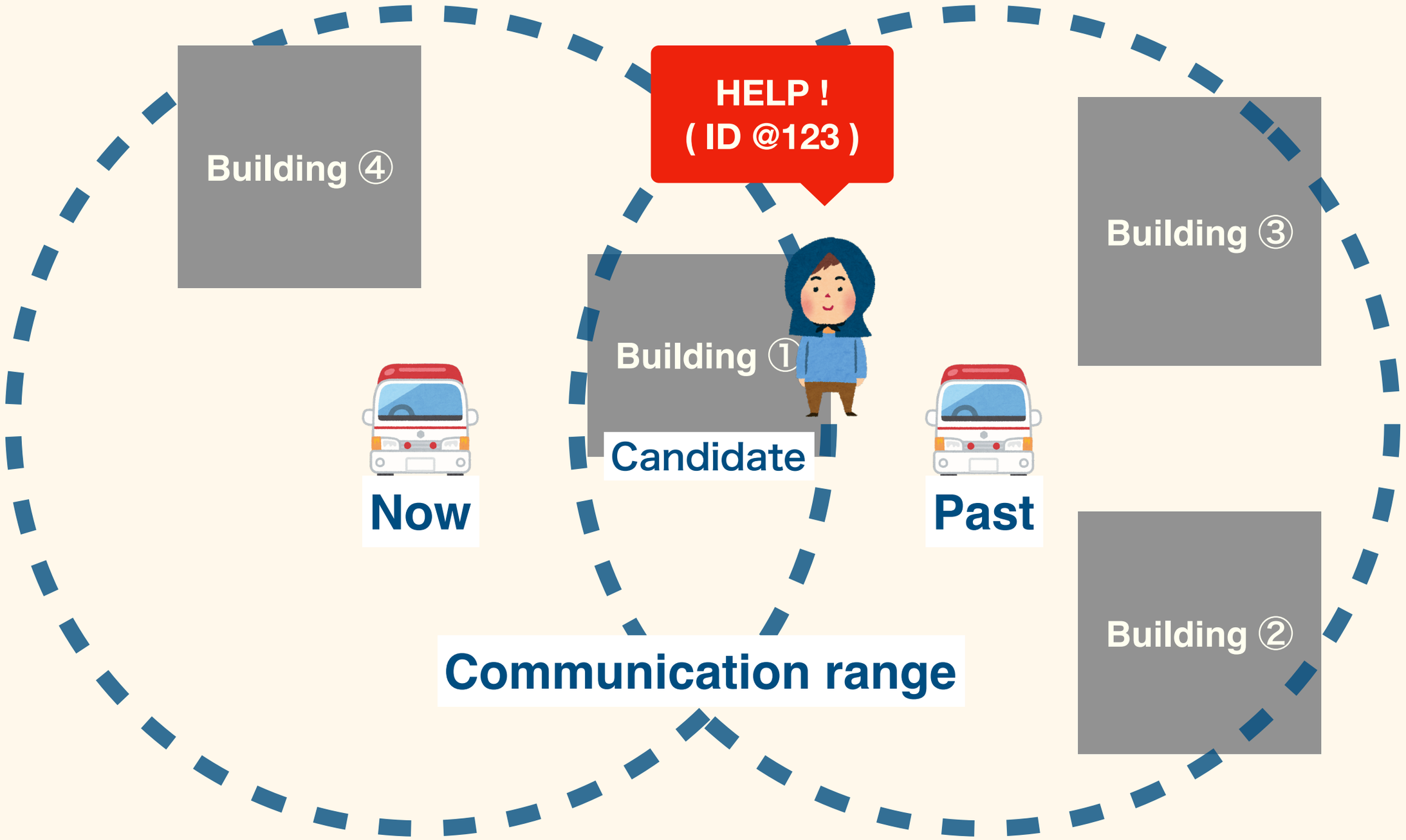
1. *Rescue* a civilian
2. *Load* a civilian
3. Getting civilian to the Refuge
4. Unload a civilian
5. Search other civilians

1. *Rescue* a civilian
2. Leave a building
3. Search other civilians

Guessing the civilian's location



Guessing the civilian's location



RoboCup Rescue 2020 ONLINE Agent Simulation

Thank you for your attentions!