

Venice - June 16th, 2014

## THE INCLUSIVE PROJECT

For accessibility and safety

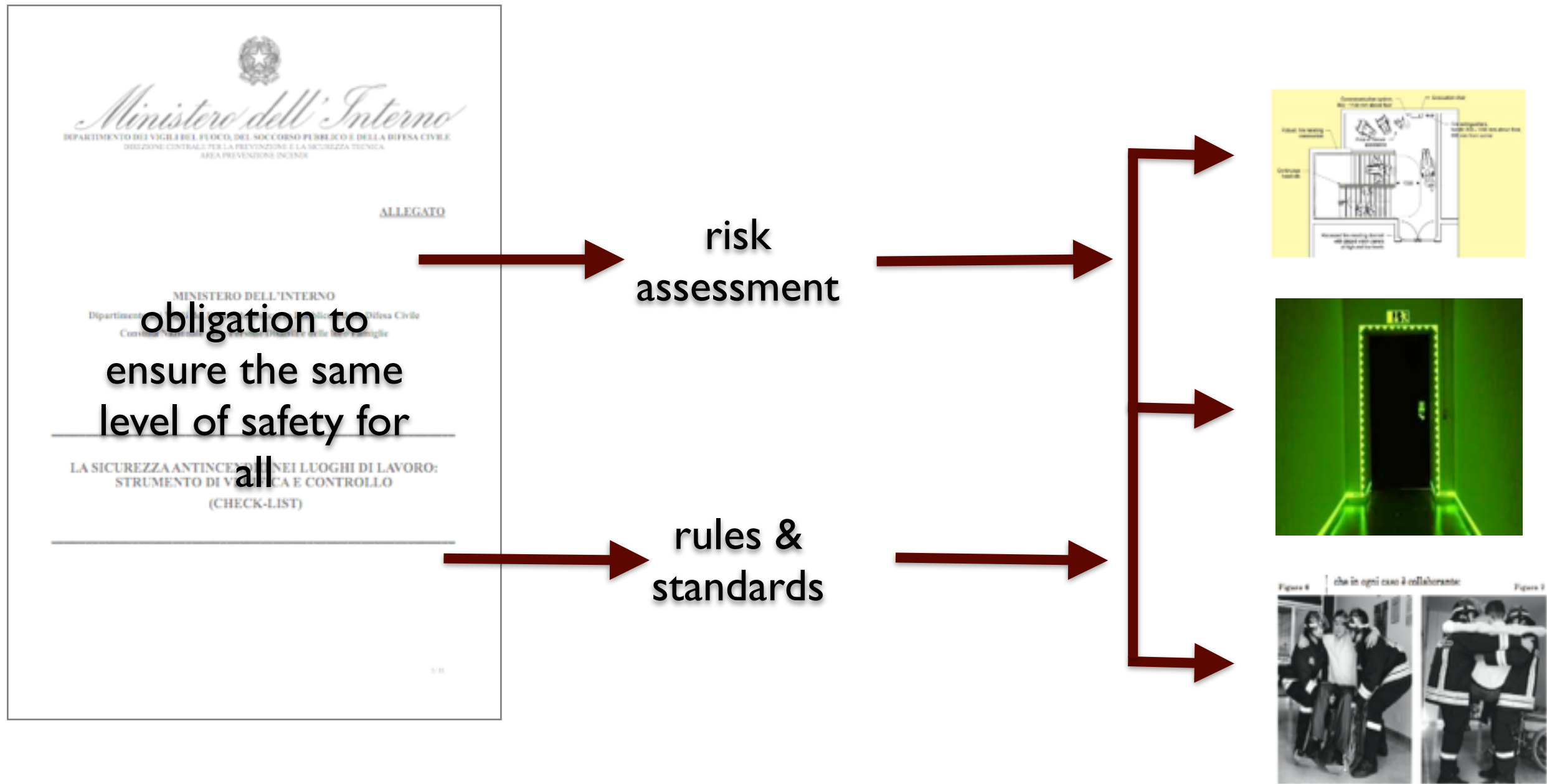


# Focus on the safety of people with special needs

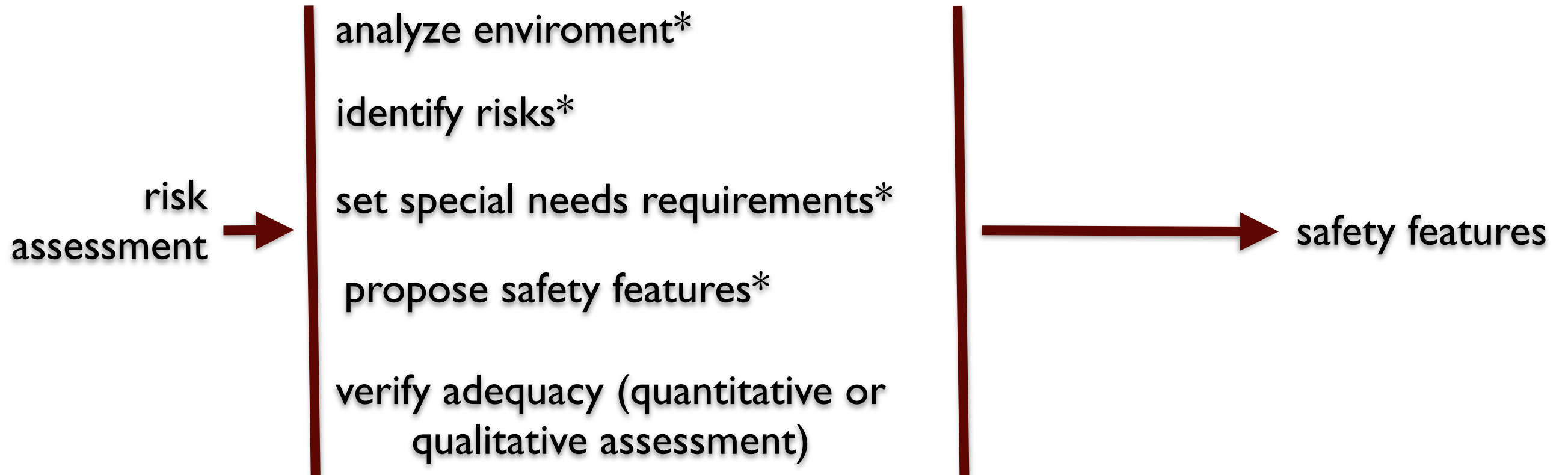
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## special needs: safety in case of fire



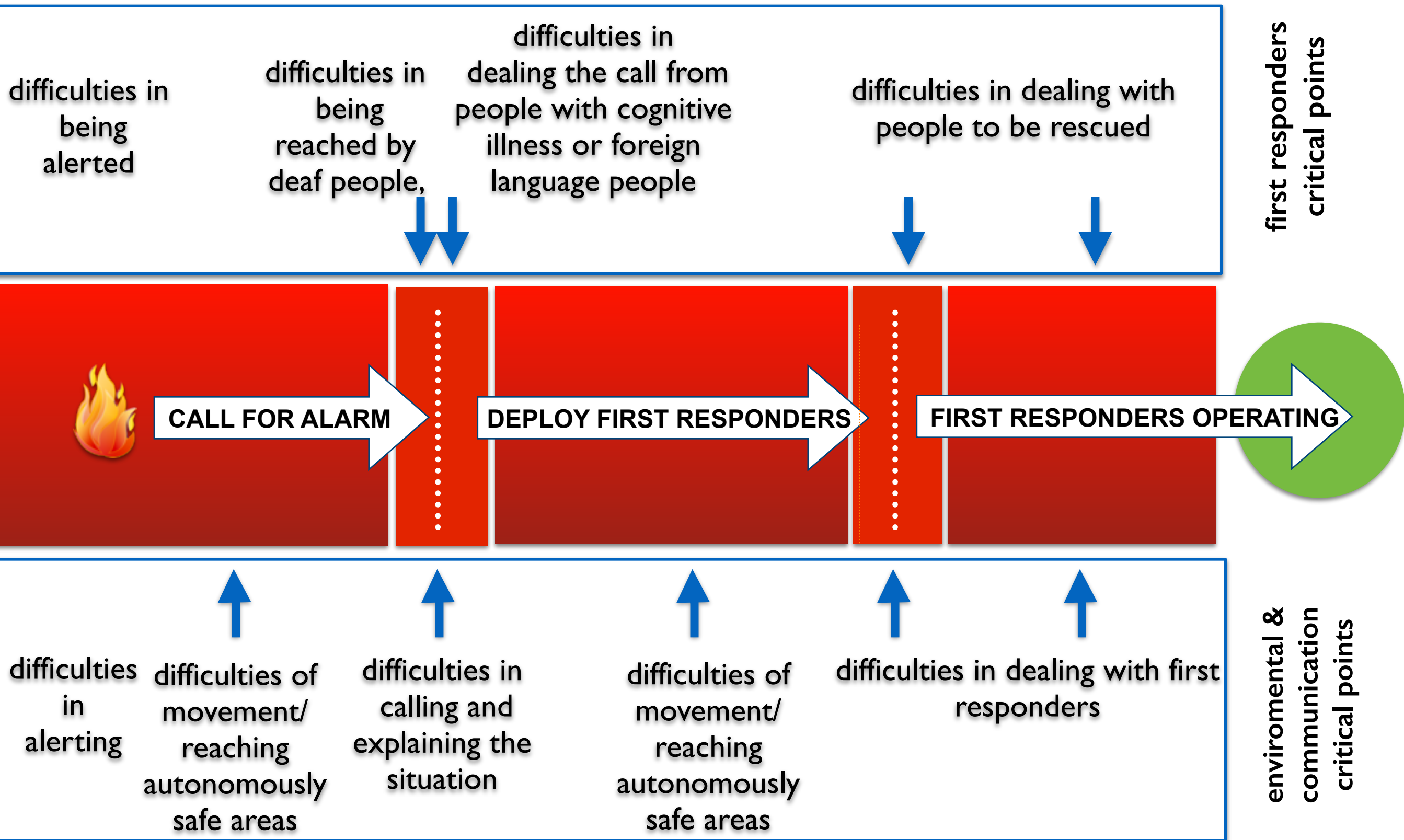
## special needs: safety in case of fire



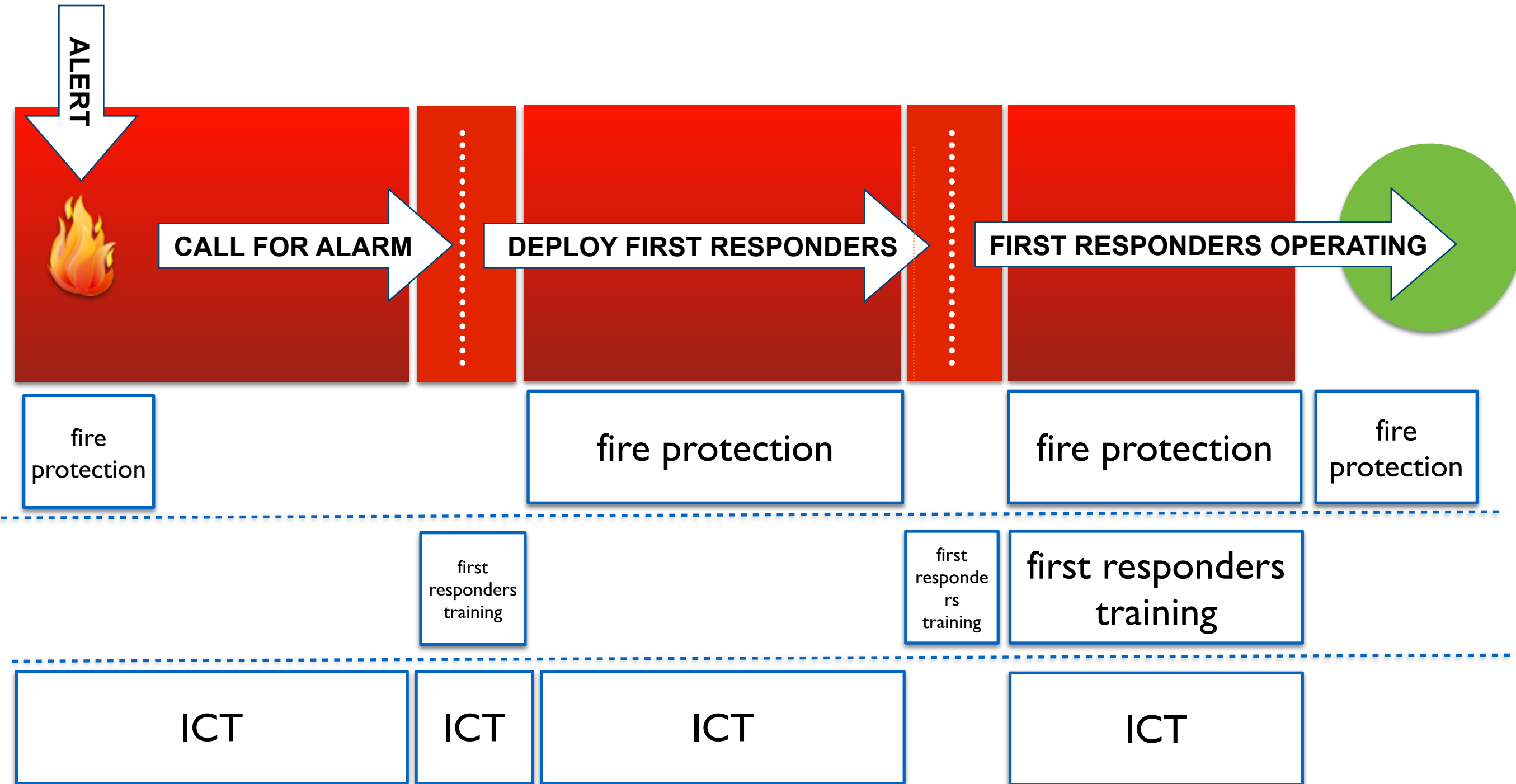
*\* togheter with interested people, whenever possible*

rules & standards → safety features

# special needs: safety in the general case



# special needs: safety in the general case



## special needs

vs

## rescue services needs

1. being alerted
2. raising the alarm, receiving/exchanging information with the control room
3. understanding what to do
4. moving along emergency egress routes
5. dealing with first responders

1. alert people
2. receiving the alarm, localizing the caller, understanding the caller's needs
3. explaining what to do
4. bringing the fastest service
5. dealing with the caller





# special needs vs rescue services needs

I. being alerted

I. alert people

fire  
protection  
rules

ICT, social media

alarm systems  
suitable to  
everybody needs:

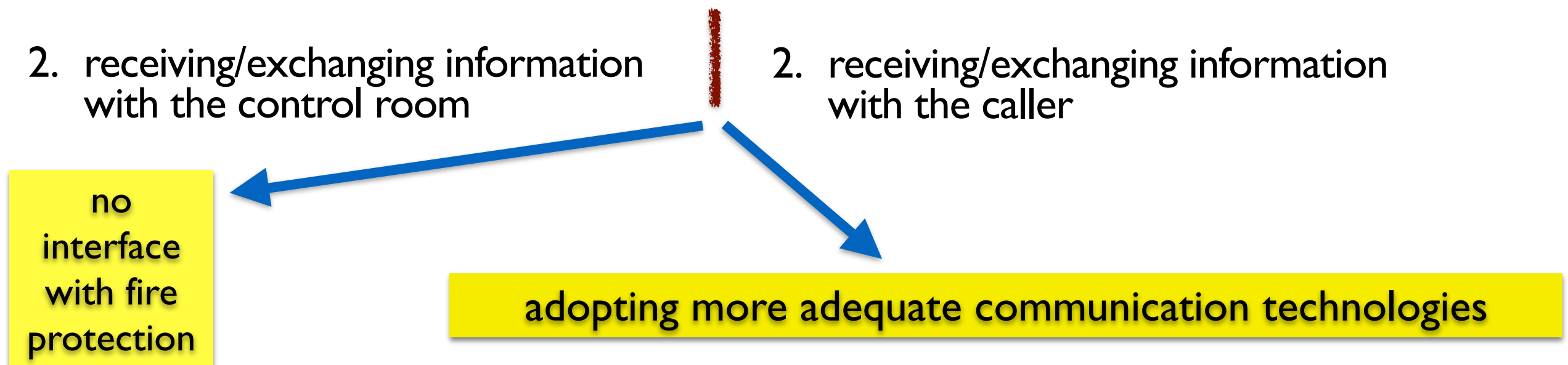
- sound
- light, strobes
- vibrations

- mass alarm
- social media

while social media and emergencies are  
widely studied (i.e. EENA Cosmic  
project) there's a research gap about  
their application to inclusive needs



## special needs vs rescue services needs



*The main problem is related to deaf people and people with cognitive disabilities. In both cases, the EU directive on Universal Services asks for the “Access to the publicly available telephone services to all, including people with special needs or low income, who may receive direct support public authorities”.*

*The CNVVF has been following some relevant EU funded project:*

- REACH 112 (<http://www.reach112.eu>) which has shown that 112 emergency call centers can be accessible for deaf people*
- ESENET (<http://www.esenet.org>) which has shown the need to develop new applications with existing technologies (even if R&D efforts are needed) but within a more appropriate legislative framework.*

*Consequently, the CNVVF is developing a cost free, web based solution aimed at giving access to deaf people to call the emergency number 115 and ask for rescue*



## special needs vs rescue services needs

3. understanding what the control room suggests to do

3. explaining to the caller what to do

fire protection provisions  
adequate to early  
event phases

adopting more adequate  
communication technologies

*Special needs are related to mobility impairments, language barriers, cognitive difficulties. Answers can be found in:*

- training first responders to deal with the most of such needs;*
- adopting an inclusive design of buildings and public spaces;*
- developing ICT solution tailored to the needs*

*The EU implementation of the directive on Universal Services asks the answer to foreign language callers.*

*The CNVVF has started years ago systematic training at all levels of operations personnel to manage the rescue operations in case of special needs.*

i.e. refuge  
areas,  
emergency  
management



## special needs vs rescue services needs

4. moving along emergency egress routes

4. bringing the fastest service

fire protection provisions  
adequate to all the event phases

weak interface with ICT



enhancement of rules,  
development of good  
practices

dissemination to  
employers, risk assesment  
professionals etc.

*elderly people and people with cognitive illness can  
be helped by ITC special apps*

*SAVEME (<http://www.saveme.org>) has shown that in complex  
buildings smatphone and tablet can help people orientating  
during emergencies*

## special needs vs rescue services needs

5. dealing with first responders

5. dealing with the caller

weak interface with fire protection

weak interface with ICT

training & information

*when the first responders get in touch with people to be rescued, the rescue needs must match with the capability of first responders to deal with such needs. the only way to improve such phase of the operations is to give an adequate training to first responders*



information to public

training of firefighters

*data exchange between control rooms can help rescuers*

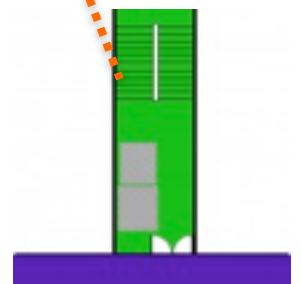


# in which areas is it still safety lacking?

|   | <i>multilingual</i> | <i>aged persons</i> | <i>children</i> | <i>sensorial disability</i> | <i>phisical disability</i> | <i>mental illness</i> |
|---|---------------------|---------------------|-----------------|-----------------------------|----------------------------|-----------------------|
| <i>reaching people with correct information in ordinary condition</i> | ✓                   | ✓                   | ✗               | ✓                           | ✓                          | ✗                     |
| <i>reaching people with correct information in emergency</i>          | ✗                   | ✗                   | ✗               | ✓                           | ✓                          | ✗                     |
| <i>helping people to get autonomously safety places</i>               | ✗                   | ✓                   | ✗               | ✓                           | ✓                          | ✗                     |
| <i>helping people to get safety places</i>                            | ✗                   | ✓                   | ✗               | ✓                           | ✓                          | ✗                     |
|   |                     |                     |                 |                             |                            |                       |

✓ = partly/completely addressed

✗ = not still addressed





partly addressed

|   | <i>language barriers</i>                        | <i>aged persons</i>                             | <i>children</i>                                 | <i>sensorial disability</i>                     | <i>physical disability</i>                      | <i>mental illness</i>         |
|---|---|---|---|---|---|-------------------------------|
| <i>reaching people with correct information in ordinary condition</i> | <i>signs-information</i>                        | <i>signs-information</i>                        | ✗   | <i>signs-information</i>                        | <i>signs-information</i>                        | ✗                             |
| <i>reaching people with correct information in emergency</i>          | <i>systems/ICT</i>                              | <i>systems/ICT</i>                              | ✗   | <i>systems/ICT</i>                              | <i>signs/ICT</i>                                | <i>staff/rescuer training</i> |
| <i>helping people to get autonomously safety places</i>               | <i>fire protection</i>                          | <i>fire protection</i>                          | <i>fire protection</i>                          | <i>fire protection</i>                          | <i>fire protection</i>                          | <i>staff/rescuer training</i> |
| <i>helping people to get safety places</i>                            | <i>fire protection - staff/rescuer training</i> | <i>fire protection - staff/rescuer training</i> | <i>fire protection - staff/rescuer training</i> | <i>fire protection - staff/rescuer training</i> | <i>fire protection - staff/rescuer training</i> | <i>staff/rescuer training</i> |
|   |   |   |   |   |   |                               |

addressed

to be addressed



questions?



thank you