

01256 005 00778  
02135 45787 5779 3877  
778797 48779 878 5554587  
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# VoiceGuard

Public Warning and Notification System



*Professional tool for protection of human lives , health and properties*

# Introduction

## Leos Nevole

Senior Key Account Manager

mob.: +420 724 132 872; nevole@colsys.cz

### COLSYS s.r.o.

- Czech ownership
- 26 years on the market
- Experience with WIS - more than 10 years
- 230 employees
- 33 mil. EUR revenue



### PROTEKTA d.o.o.

- Local partner





# **Modern Warning and Information System against Floods, Chemical Accidents and other Emergencies - Czech Experience**

by Leos Nevole, Colsys s.r.o.

# Content

- 1. THREATS**
- 2. DESCRIPTION OF THE SYSTEM**
- 3. BENEFITS AND FINANCING**

## Natural disasters

- Phenomenon of last decades - climate changes



# Threats

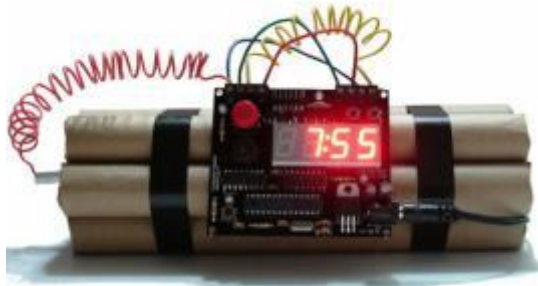
## Industrial threats

- Leakage of dangerous substances



## Terrorist threats

- Alerting and informing in case of an terrorist attack



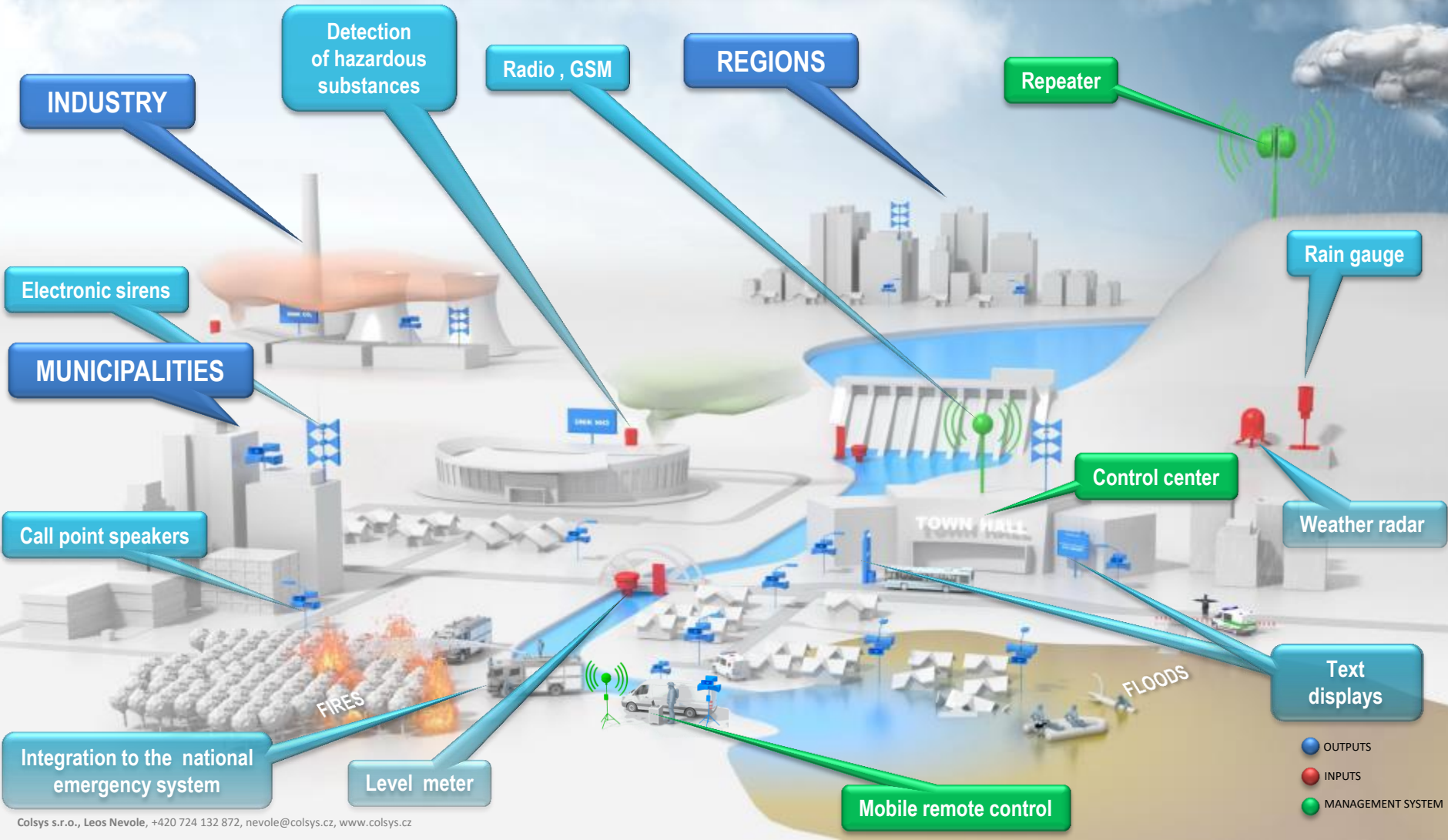
# Consequences

- Losses of human lives
- Significant economic losses
- Blackouts
- Failures of GSM networks





# System Overview



Colsys s.r.o., Leos Nevole, +420 724 132 872, nevole@colsys.cz, www.colsys.cz

# INPUTS – Environmental Monitoring

Natural disasters – flood prevention and prediction

A red, cylindrical water level sensor is shown in a blue pool of water. It has a black top section and a white bottom section. Orange concentric circles around the sensor indicate its range or detection area. A blue line points from the label to the sensor.

Water level sensor

A white rain gauge with a black top and a black base. It is mounted on a black stand. A blue line points from the label to the gauge.

Rain gauge

A white, dome-shaped weather radar unit on a black base. A blue line points from the label to the radar.

Weather radar



# INPUTS – Chemical Monitoring

## Industrial disasters - detection of hazardous substances

Fire Detection

Chlorine sensor



Gas sensor



CO2 Sensor



ICE SKATING STADIUM

NH3 (Ammonia)



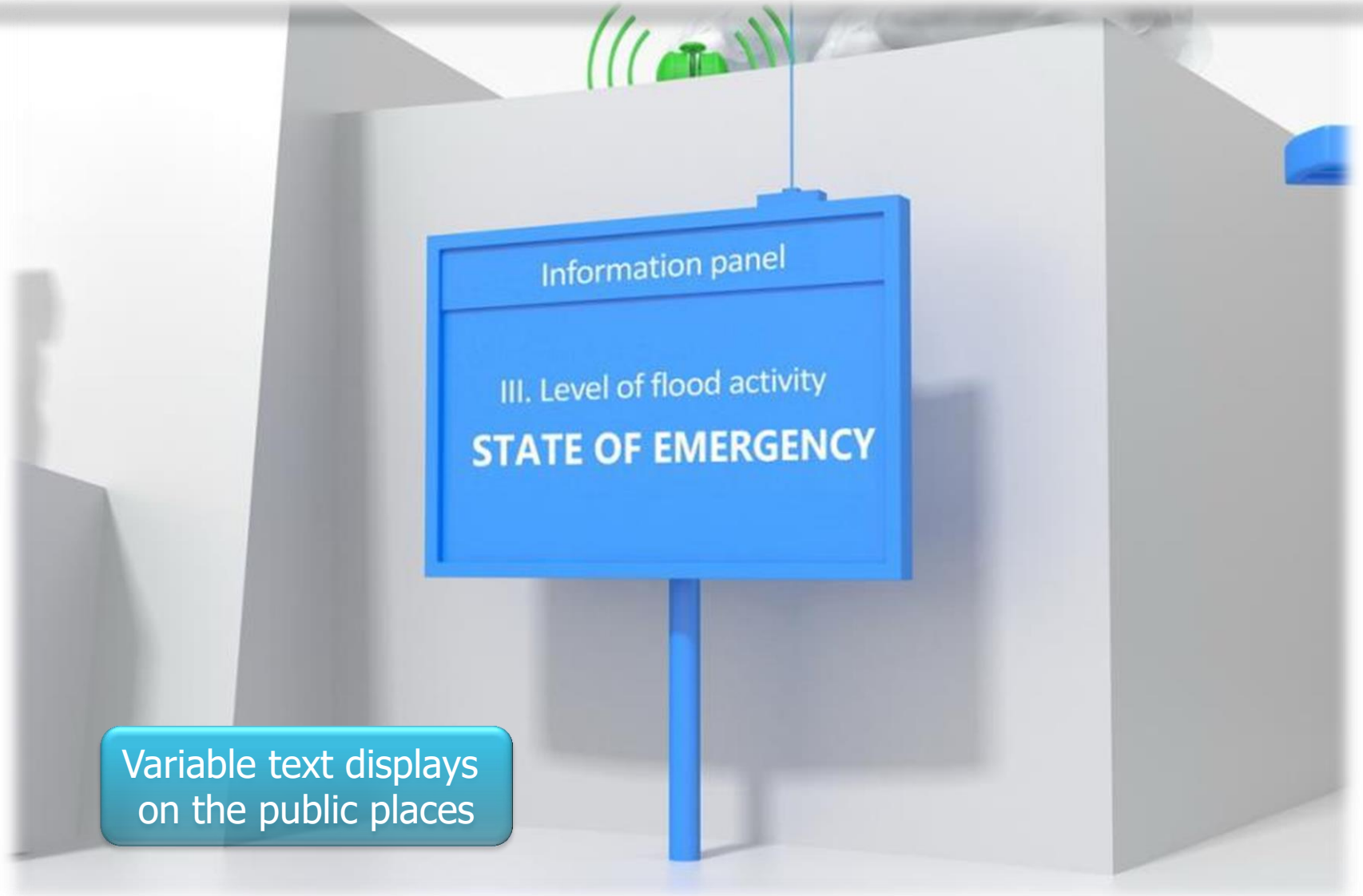
POISON CLOUDS

# OUTPUTS for Alerting and Notification

Electronic sirens

Call point speakers

# OUTPUTS for Alerting and Notification



# OUTPUTS for Alerting and Notification

Variable text displays  
on the bus stops

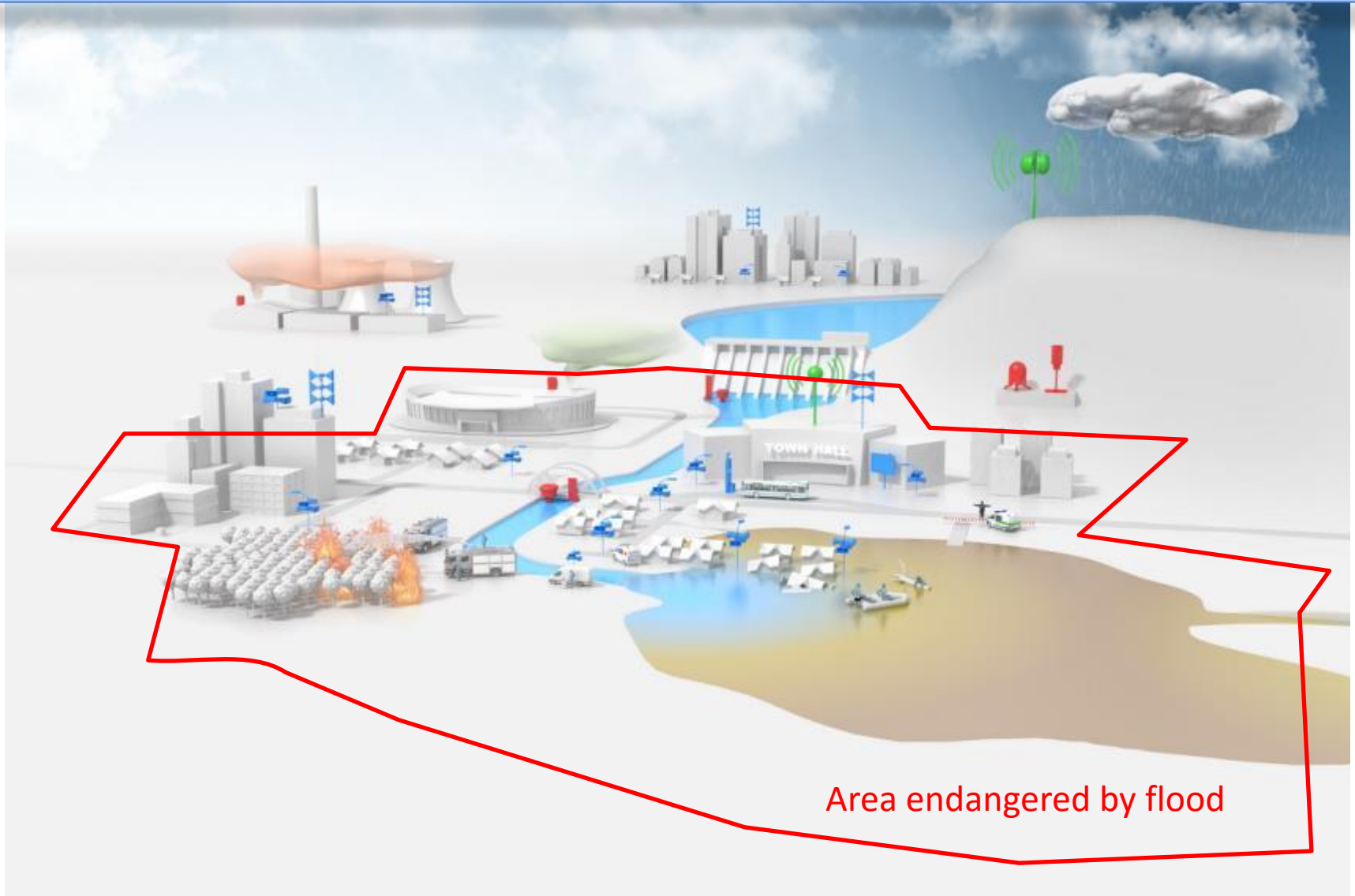


SMS messages

20 Hlavní nádraží	2 min.
03 Zevlova	6 min.
18 Antonova	8 min.

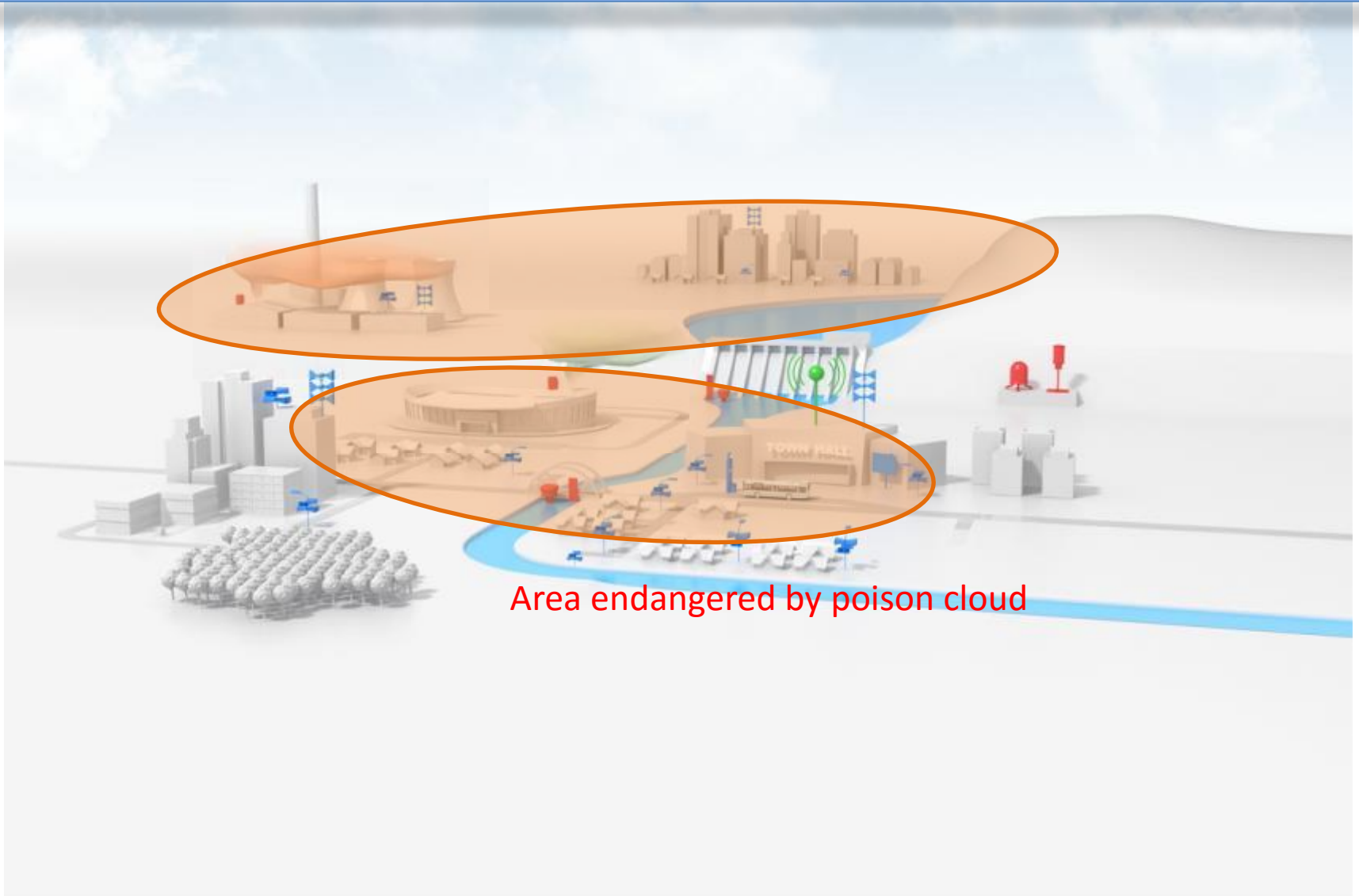
Informační panel  
III. Level of flood activity  
**STATE OF EMERGENCY**

# Risky Area Potentially Hit by Flooding



Area endangered by flood

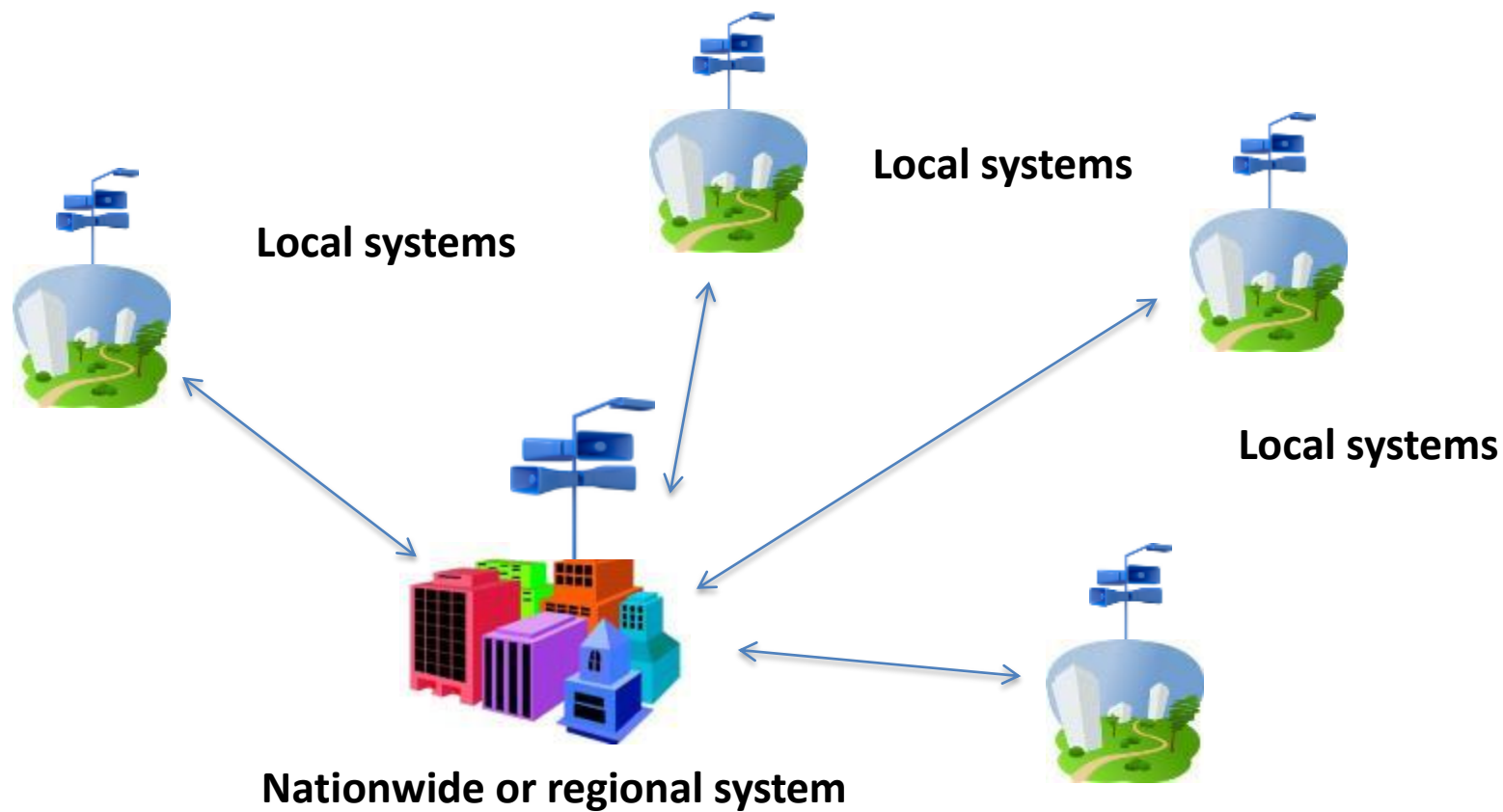
# Risky Area Potentially Hit by Poison Cloud



Area endangered by poison cloud



# Levels of the Warning and Information System



# Operational Center



Emergency operational center



single client

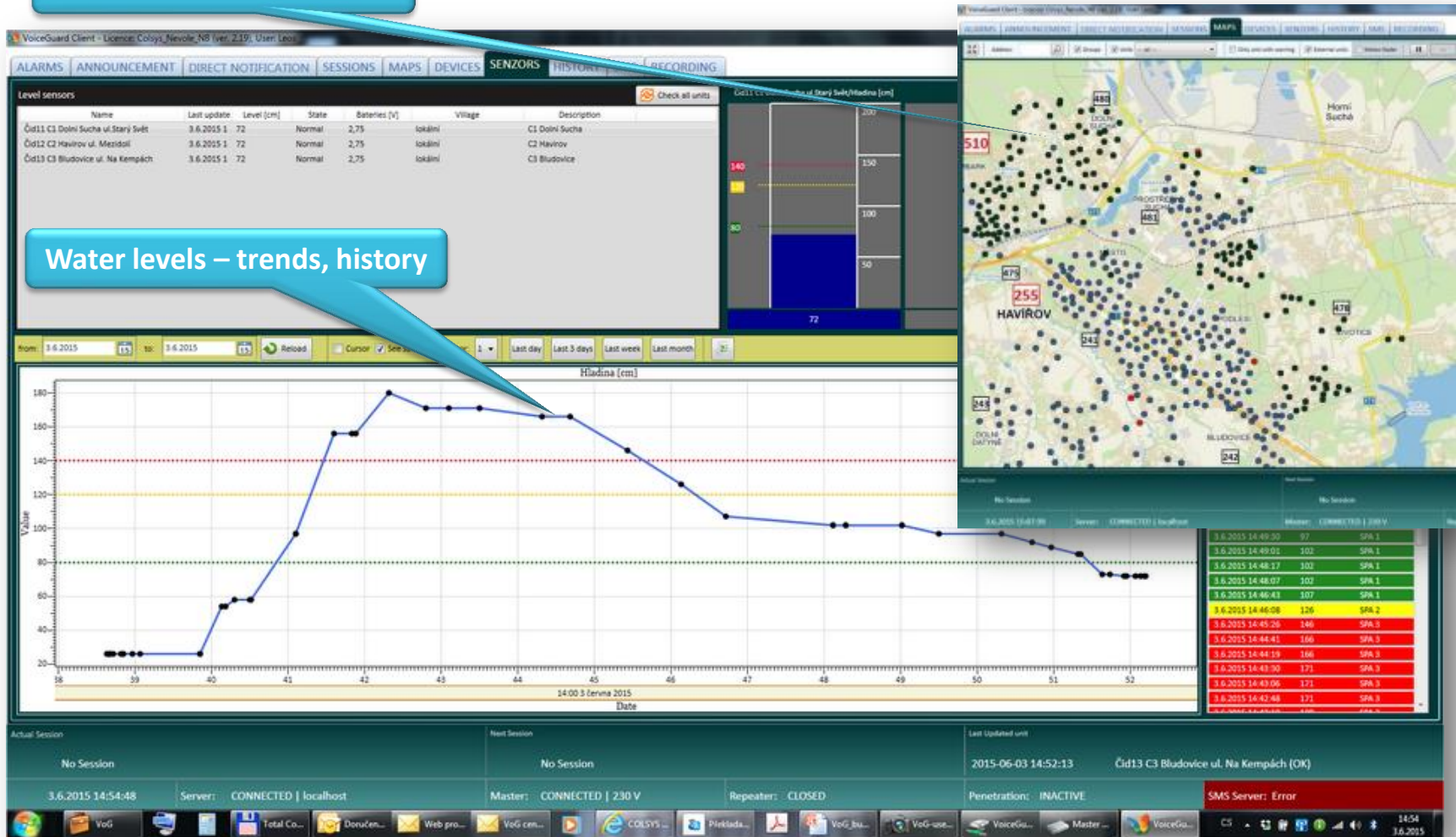


master unit

# Management System Interface

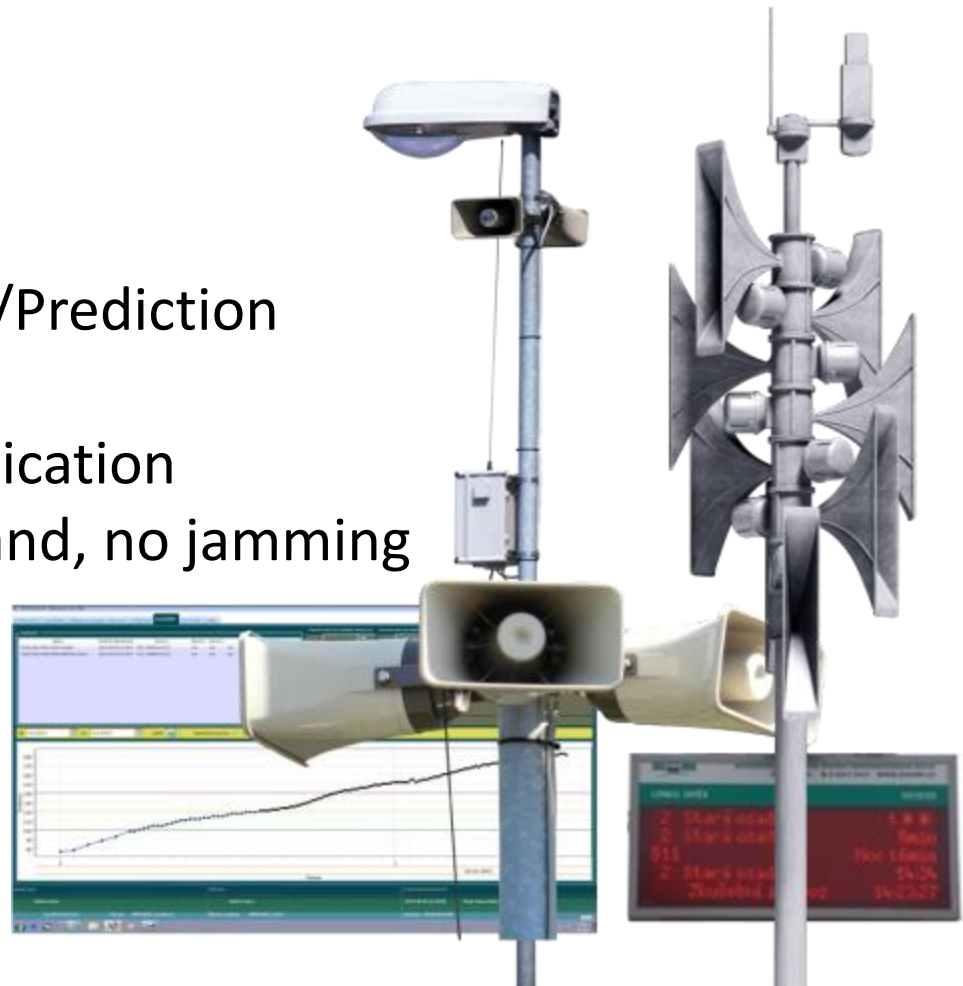
On-line info on the maps

Water levels – trends, history



# Main Features

- Monitoring/Prevention/Prediction
- Zoning/Targeting
- Wireless radio communication
- Dedicated frequency band, no jamming



# Benefits

- professional tool for protection of human lives , health and properties
- in advance early warning
- high quality and understandability of verbal warning information
- independent on commercial networks (e.g. GSM)
- on-line operational information and alarm data
- integration to the national early warning system
- can be used as municipality voice information system



- Typical users:
  - Municipalities
  - Regions
  - Dam administrators
  - Emergency services
  - Industry
- Financing, grants
  - In the Czech Republic 70% subsidy from EU funds



## REFERENCES in the Czech Republic

- over 300 installations in municipalities and industry sector
- Sales 18mil. Euro
- IVVS Zlin Project
  - regional application
  - **390k** population
  - **13 integrated local WIS**
  - **2068** call point speakers
  - **30** sirens
  - **53** water levels
  - **1** meteo radar



# Call for Action

- ❑ Preliminary feasibility study  
(Technical report, specification, map, schematics and rough budget )
- ❑ FREE for the first five serious candidates!





**Thank you for your attention**

**Any questions?**

