



SAF€RA's 2023 symposium, Toulouse (FR), 16th May 2023
Transition in safety and safety in transition

RESMOD-RESilience enhancement MODel

Prof. Pavel Danihelka



Guiding idea:

- COVID-19 crisis in clear form impacted emergency rescue system
- In the Czech Republic, volunteer firefighters are very popular
- We can learn from their experience

Consultations with firefighters

- During educational activities
- Open discussions
- Consultations with lecturers
- Anonymous web-based questionnaire to firefighters' units

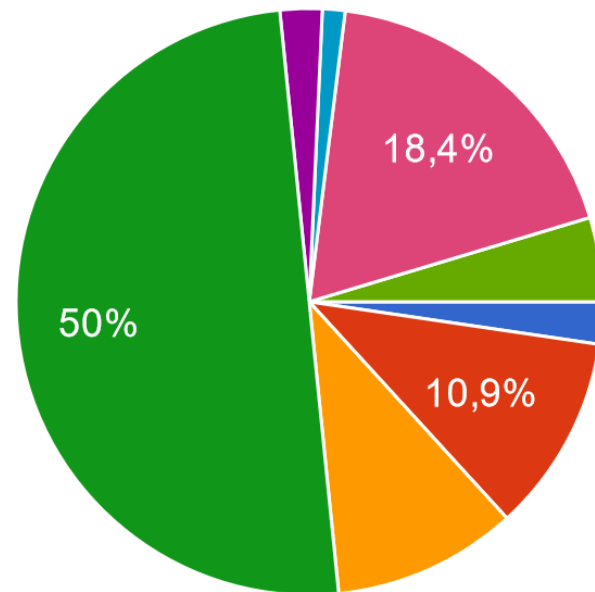
Questionnaires

- Together with Volunteer Firefighters Association
- Answers from 560 units from 6 288 overall units number
- **78 % answers wish to deepen learning process**
- What they feel to need for resilience building:
 - Financing,
 - technical support,
 - more members,
 - education and training,
 - better communication,
 - knowledge base

Influence of various contracts – more or less feeling of „assurance“ in the case of illness or accident

Jaký pracovní-právní vztah mají členové jednotky SDH vaší obce :

560 odpovědí



- Pracovní poměr
- Dohodu o pracovní činnosti
- Dohodu o provedení práce
- Dohodu o členství v jednotce bez vzniku pracovní-právního vztahu
- Dohody jsou u jednotlivých členů různé
- Jiný závazek
- Žádný
- Nevím

Remarks to the resilience of emergency response system extracted from questionnaire

- Important problem: communication gaps
 - One-directional
 - Not enough of information from „above“
 - Information chaotic, contradictory
 - Power-play instead of leadership
- Local units felt to be „abandoned“ by headquarters and government
- Real resilience was observed much more at local level than at central level

What people missed during emergency/crisis

- Clear, concise, comprehensible and valid information
- Leadership instead of orders
- Acceptance of improvisation and creativity by bosses
- Flexibility
- Acceptance of informal horizontal, less dependent structures
- Real emergency plans for real situations (von Clausewitz: „Most of war plans stop to be valid in the moment of contacting enemy“)
- Expressed gratitude for extra work

What are possible crucial inabilities?

- Inability to predict (Macron: „we have to imagine unimaginable“)
- Inability to learn from running events
- Inability to adapt to new situation

Community & enterprise resilience importance

- Basic question: is community/enterprise safety matter of (rescue) service or internal property of community as system?
- In the case of smaller events, crisis management is sufficient tool to mitigate disaster consequences efficiently and fast enough
- When disaster has a big extend, strong, flexible and timely reaction is necessary – „bottom-up“ resilience is crucial as system property

Czech experience I: Tornado 24.6.2021

- Very rare event, in this extend previously 9 centuries ago in Czechia



- In few days: thousands of volunteers at place, donations by people more than one billion of CZK (40 mil. EUR)

Czech experience II: Reaction of society to the shortage of face masks:

„Rouskovnik“ – „Face Mask Tree“ at hundreds of places in country

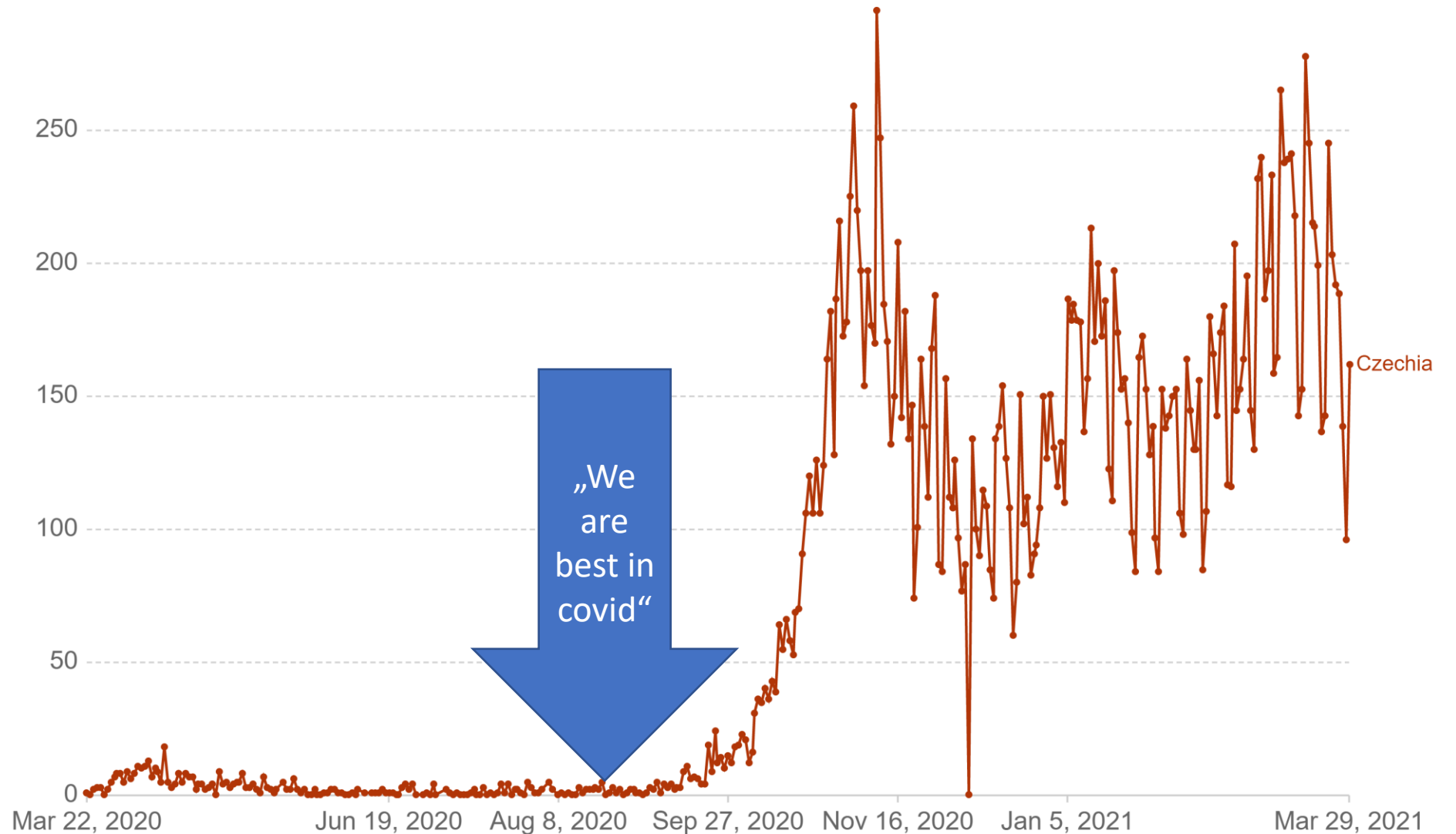
„We must help to each other“



Daily new confirmed COVID-19 deaths

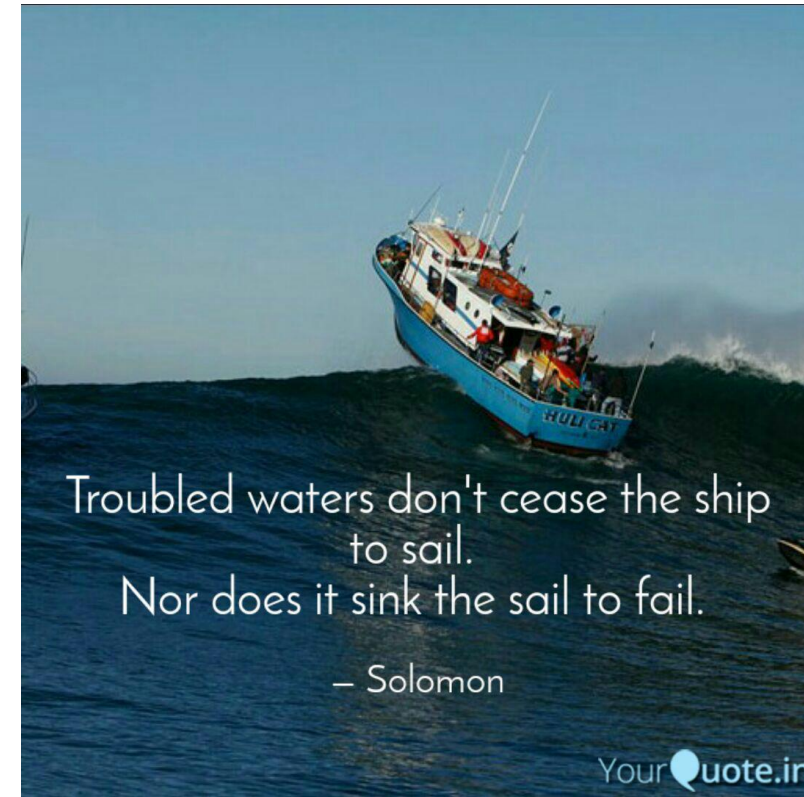
Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

And small provocation



Conclusions:

- Resilience is growing from combination of pyramidal and horizontal structures
- Main force is at bottom, but leadership is crucial
- Communication is the key factor for success



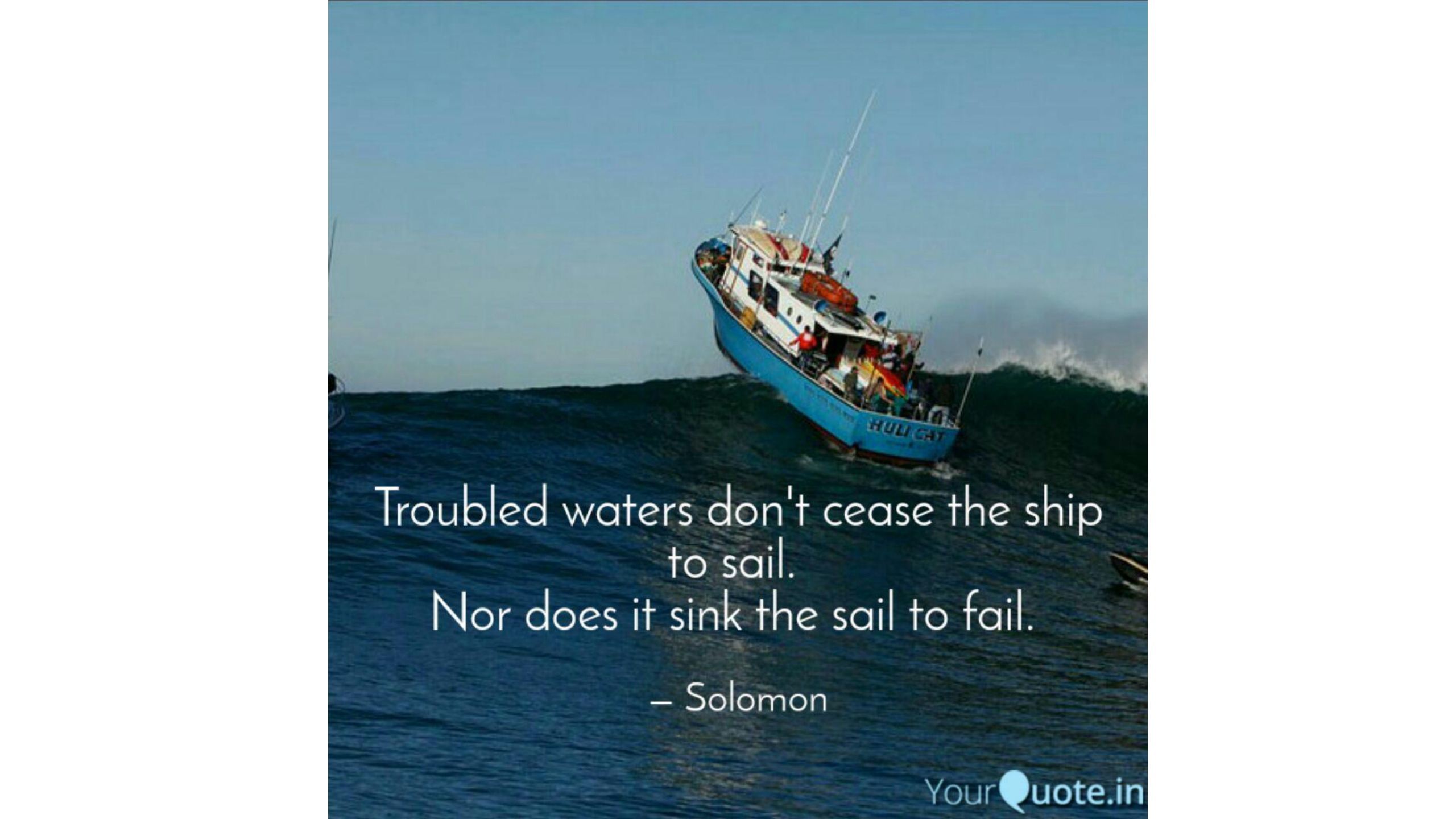
Thank you for your attention

Contacts:

pavel.danihelka@vsb.cz

danihelka@vubp.cz





Troubled waters don't cease the ship
to sail.
Nor does it sink the sail to fail.

– Solomon