



**BERGRETTUNG**  
Bundesverband



mobile services for  
**Public Safety**

# The Integration of Mountain Rescue Services into Cross-Regional Crisis & Disaster Management

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## NEW CHALLENGES

"In Austria, a new law came into effect on January 1, 2024, which provides rescue organizations with substantial fundings.

"The aim of this federal law is to support legally recognized rescue organizations, as well as their umbrella organizations, in their investments to enhance their resilience and performance in crisis and disaster situations."

SAMARITERBUND





## New Tasks and Challenges



<https://vimeo.com/467031984>





Karl Dieter  
BRÜCKNER

## Possible Crises- and Disasters for mountain rescue

- **Major damage events**

- very high number of affected persons
- very short lead time

- **Wildfire**

- low number of affected persons,
- longer lead time

- **Avalanche disaster**

- high number of affected persons,
- very short lead time
- ÖBRD expertise

- **Blackout**

27.10.24



Blackout



Katastrophenlawine



Waldbrand



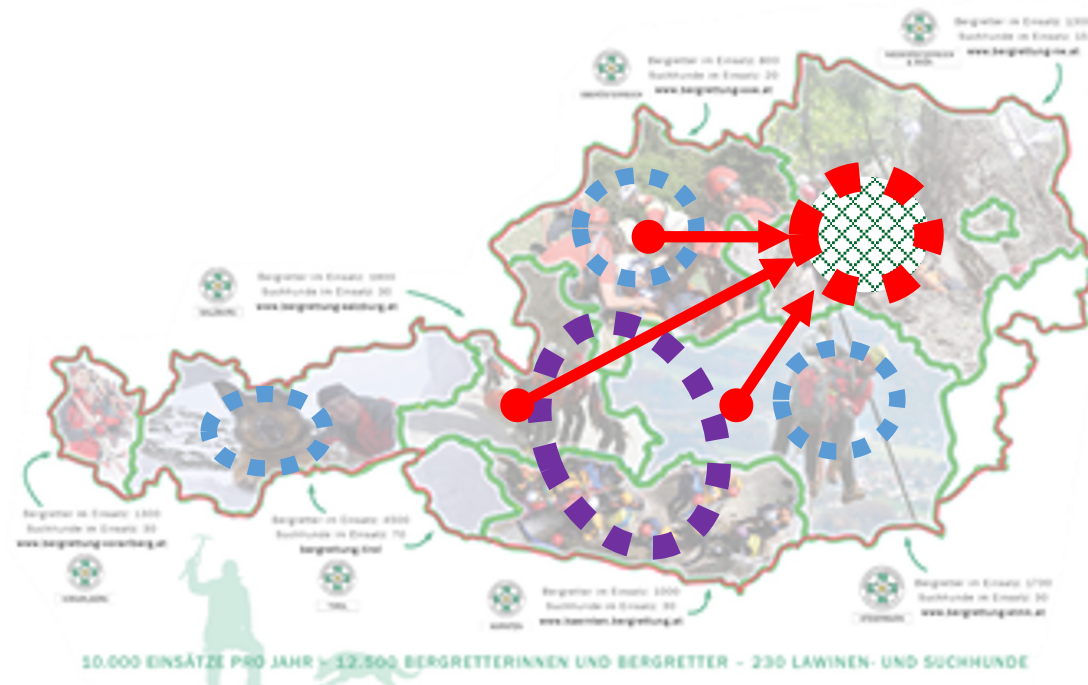
Grossschaden



# Joint Management of Crisis and Disaster Situations

## Dimension / Scaling

- Individual, or
- simultaneously
- Cross-border/Country-supporting





# Crisis- & Disastermanagement Bergrettungsdienst

SKKM 2024 is a trigger for us to improve Communication & Coordination for large scale events which requires a cross regional response

We need to prepare for such Events organizational, educational and technical

The screenshot displays the 'WissensBox 2.0' website. On the left, there is a navigation menu with the following items:

- 01. Krisen und Katastrophen
- 02. Referate im ÖBRD-Bundesverband (ENTWURF)
- 03. Medien
- 04. Bergrettungstechniken
- 05. Technische Themen
- 06. Lawinen- und Suchhunde

The main content area shows a list of topics under the heading '02. Krisen- und Katastrophenkompetenz im ÖBRD':

- 01. Krisen und Katastrophen (Bundesweite Vorbereitung)
- Bergwaldbrände
- Großschadenslagen am Berg
- Naturkatastrophen

On the right side of the screenshot, there is a search bar and a list of articles or news items:

- Staatliche Ausbildungen via BMI und ÖBRD Bundesverband
- Leitfäden BMI
- Neues Bundesgesetz zur Unterstützung RD's seit 1.1.2024
- Mögliche Krisen und Katastrophen Szenarien für den ÖBRD
- Kommunikation: Ministerien - ÖBRD BV - ÖBRD LORG
- Waldbrand
- Grossschadenslagen
- Blackout





# Crisis- & Disastermanagement Communication

Satellite based Data Link for Datacommunication during Blackouts (Starlink)

Satellite based Phone System for Voice Communication during Blackouts

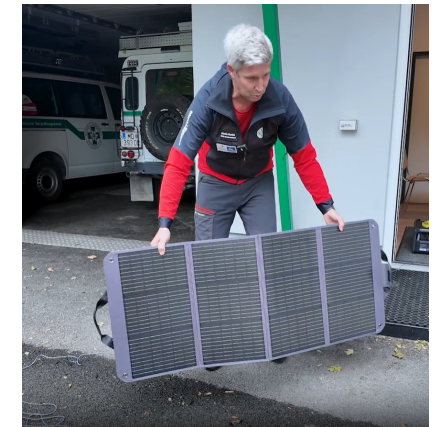
PMR Communication Plans for cross regional Large Scale Events

▼ "Starlink" in der Bergwacht Bayern



Seit August 2023 stehen der Bergwacht Bayern **neun Starlink-Systeme** zur Verfügung

Starlink ist ein Satellitennetzwerk, welches weltweiten Internetzugang bietet. So kann bei komplexen





## Incident Command - Common Operational Picture

The Incident Command System helps to prepare for large scale events. It holds the necessary data to operate in a Crisis Situation.

In a Crisis Situation the system is used to communicate within the Bergrettungsdienst and with external Organisations

Incident Command Systems helps to coordinate the operations during the Crisis

The System documents the information flow, actions executed and decisions made





# Common Operational Picture – Start!

← M0001 - Eintrag (1/1) ↑ ↓ 📄

**Info \***

Tr BWZ Information  
For the time of Dez 13 until Dez Heavy Snowfall is expected in the area  
Dachstein/Schladminger Alpen (West) to Hochschwabgruppe (East)  
Geosphere expects:  
Up to 200 cm snowfall in the valleys for the period with a daily peak of 80cm  
Up to 450 cm snowfall on the mountains for the period with a daily peak of 150cm  
Cold temperatures throughout the period and medium winds  
BWZ expects issues with traffic in the area, inaccessible areas, partial blackouts  
All ESOs need to prepare for this situation

Ausgang  Entscheidung  Eingang

**Hohe Priorität**

n/y

**Anmerkung / Rückmeldung**

Tr

📄 MELDER » LAGEDIENST ⌵

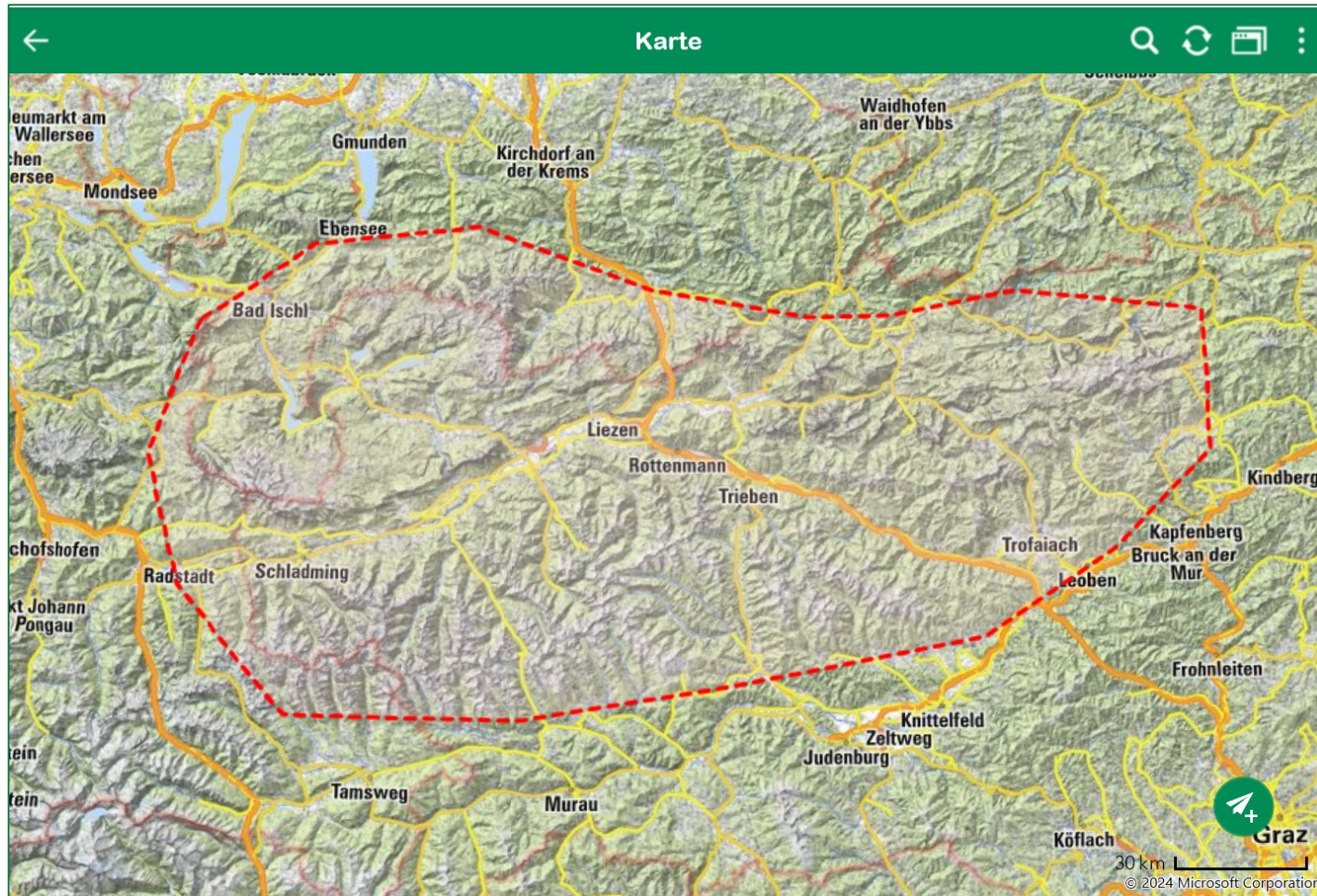
📄 EMPFÄNGER » BUNDESVERBAND ⌵

📄 VERTEILEN ⌵

📄 ORT ⌵ **P**



# Common Operational Picture – Start!





## Common Operational Picture – Elements

Messages building a Journal of the Incident. What was when reported, communicated or decided.

The Orgchart of the incident provides an overview about the relation between all acting parties.

A Map provides a graphical Common Operational Picture of the incident area

All sort of informations are used to support decision making and seamless communication



# Common Operational Picture – Messages

← M0002 - Eintrag (1/2) ↑ ↓ 📄

Info \*

Tr BWZ has informed about a heavy snowfall event.  
The BRD orgs of Sbg, OÖ, Stmk are directly affected.  
Ktn and NÖ need to prepare to provide support!

Ausgang  Entscheidung  Eingang

Hohe Priorität

n/y

Anmerkung / Rückmeldung

Tr

📄 MELDER » SEBASTIAN STEPFER ⌵

📄 EMPFÄNGER » BRD ⌵

📄 VERTEILEN ⌵

📄 ORT ⌵ **P**

📄 MEDIEN (0) RÜCKMELDUNGEN (0) LAGEINFORMATION (0) ⌵

📄 HISTORIE ⌵





# Common Operational Picture – Messages

### Einsatztagebuch

ALLE 2 EINGANG 1 EINTRAG 0 AUSGANG 1 HOHE PRIORITÄT 2 VOR ORT 0

**M0002 Stab BV » Sebastian Stepfer** 10.12.2024 19:43  
→ BRD » BRD  
**STA** !  
BWZ has informed about a heavy snowfall event.  
The BRD orgs of Sbg, OÖ, Stmk are directly affected.  
Ktn and NÖ need to prepare to provide support!

**M0001 BMI Bundeswarnzentrale » Lagedienst** 10.12.2024 18:54  
→ BRD » Bundesverband  
**BMI** !  
BWZ Information  
For the time of Dez 13 until Dez Heavy Snowfall is expected in the area  
Dachstein/Schladminger Alpen (West) to Hochschwabgruppe (East)  
Geosphere expects:  
Up to 200 cm snowfall in the valleys for the period with a daily peak of 80cm  
Up to 450 cm snowfall on the mountains for the period with a daily peak of 150cm  
Cold temperatures throughout the period and medium winds  
BWZ expects issues with traffic in the area, inaccessible areas, partial blackouts  
All ESOs need to prepare for this situation

Eingang Neuer Eintrag Ausgang



# Common Operational Picture – Messages

← M0004 - Eintrag (1/4) ↑ ↓

Info \*

Tr LO Ktn will prepare for standy during period

Ausgang  Entscheidung  Eingang


Hohe Priorität

Anmerkung / Rückmeldung

☰ MELDER » GERD BAUER ⌵

☰ EMPFÄNGER » BRD ⌵

☰ VERTEILEN ⌵

☰ ORT ⌵ 

☰ MEDIEN (0) RÜCKMELDUNGEN (0) LAGEINFORMATION (0) ⌵

☰ HISTORIE ⌵



# Common Operational Picture – Messages

### Einsatztagebuch

ALLE 4 EINGANG 1 EINTRAG 0 AUSGANG 3 HOHE PRIORITÄT 2 VOR ORT 0

M0004 **Stab Ktn » Gerd Bauer** 10.12.2024 20:08  
→ BRD » BRD  
LO Ktn will prepare for standby during period

M0003 **Stab Stmk » Christian Schwarz** 10.12.2024 20:02  
→ BRD » BRD  
LO Stmk will prepare for the Event  
20 of 50 Stations are in the area

M0002 **Stab BV » Sebastian Stepfer** 10.12.2024 19:43  
→ BRD » BRD  
BWZ has informed about a heavy snowfall event.  
The BRD orgs of Sbg, OÖ, Stmk are directly affected.  
Ktn and NO need to prepare to provide support!

M0001 **BMI Bundeswarnzentrale » Lagedienst** 10.12.2024 18:54  
→ BRD » Bundesverband  
BWZ Information  
For the time of Dez 13 until Dez Heavy Snowfall is expected in the area  
Dachstein/Schladminger Alpen (West) to Hochschwabgruppe (East)  
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All ESOs need to prepare for this situation

Eingang Neuer Eintrag Ausgang



## Common Operational Picture – Messages

Messages are the core of Incident Management

Messages can be incoming-, outgoing- or decision-information

The incident management system allows the read and write information anytime, anywhere

The sum of all messages makes up the Journal of the incident





# Common Operational Picture – Organization

**Einsatzorganisation (17)**

- ✓ O24-015 - Heavy Snowfall
  - > BRD » ÖBRD Einsatz Organisation - Geplant 8
  - ✓ Xterne Organisations Externe Organisation - Geplant 4
    - BMI Bundeswarnzentrale Organisation - Aktiv
    - weitere Behörden » Behörden Externe Organisation - Geplant
    - weitere Einsatzorganisationen » Einsatzorganisationen Externe Organisation - Geplant
    - weitere Organisationen Externe Organisation - Geplant

**Eingang** **Organisation** **Kräfte & Mittel** **Ausgang**



# Common Operational Picture – Organization

**Einsatzorganisation (17)**

- ✓ **O24-015 - Heavy Snowfall**
  - ✓ **BRD » ÖBRD** 8
    - ✓ **Einsatz Organisation - Geplant** 1
      - Stab BV » BRD BV AT  
Funktion - Geplant 1
        - Sebastian Stepfer » BRD BV AT  
Unterstützer - Aktiv ⏻ 🔍 ⏩ ⓘ ⋮
      - > Stab Ktn » BRD LO Ktn  
Funktion - Geplant 1
      - Stab NÖ » BRD LO NÖ  
Funktion - Geplant
      - Stab Sbg » BRD LO Sbg  
Funktion - Geplant
      - > Stab Stmk » BRD LO Stmk  
Funktion - Geplant 1
      - Stab Tirol » BRD LO Tirol  
Funktion - Geplant
      - Stab Vbg » BRD LO Vbg  
Funktion - Geplant
      - Stab OÖ » BRD LO OÖ  
Stabsfunktion - Geplant
    - > **Xterne Organisationen** 4
      - Externe Organisation - Geplant

**Eingang** **Organisation** **Kräfte & Mittel** **Ausgang**




# Common Operational Picture – Organization

The screenshot displays a mobile application interface for 'Lage Management'. The main screen shows a list of active incidents (AKTIV) with details such as 'O24-015 - HEAVY SNOWFALL'. A dialog box titled 'Funktion wählen' is open, allowing the user to select a function and organization. The dialog shows 'Einsatz \*' set to 'Heavy Snowfall' and 'Organisation \*' set to 'BRD BV AT'. Below this, there is a section for 'FUNKTIONEN (1) BESETZT (2) GEPLANT (0)' with a sub-section 'Stab BV » Funktion' containing 'BRD BV AT'. The background interface includes a sidebar with navigation options like 'ÜBERSICHT', 'Lagen (3)', 'Meldungen (0)', 'Chat', 'Kalender', 'Organisationen', and 'Historie'. The bottom navigation bar shows icons for home, navigation, settings, help, and refresh, along with status indicators for 'Stab BV', 'Neuer Termin / Übung', and 'Ad hoc'.



# Common Operational Picture – Organization

← Ausgang 


**Info \***


T: Need more details about timeline of snowfall


Ausgang  Entscheidung  Eingang


Hohe Priorität



n/y


MELDER » SEBASTIAN STEPFER 


EMPFÄNGER » ANALYST OTTO WETTERFROSCH 

An	Kontakt
<input type="text" value="GeoSphere"/>	T <input type="text" value="Analyst Otto Wetterfrosch"/>
Kontakt über	Kontaktdaten
<input type="text" value="Telefon"/> 	T <input type="text" value="+49 178315 377"/>

VERTEILEN 

ORT  

MEDIEN (0) 

 Anhang





# Common Operational Picture – Organization

← Einsatzorganisation (18) ↻ 🔍 ⬆️ ⋮

- ✓ O24-015 - Heavy Snowfall
  - > BRD » ÖBRD  
 Einsatz Organisation - Geplant 8 ⋮
  - ✓ Xterne Organisationsen  
 Externe Organisation - Geplant 4 ⋮
    - BMI Bundeswarnzentrale  
 Organisation - Aktiv ⋮
    - weitere Behörden » Behörden  
 Externe Organisation - Geplant ⋮
    - weitere Einsatzorganisationen » Einsatzorganisationen  
 Externe Organisation - Geplant ⋮
  - ✓ weitere Organisationen  
 Externe Organisation - Geplant 1 ⋮
    - GeoSphere  
 Externe Organisation - Aktiv ⋮

⏪ 📞 ⏩ ⓘ ⋮

📎+

🏠 Eingang 🧑 Organisation 🧑 Kräfte & Mittel ➡ Ausgang ⋮



## Common Operational Picture – Organization

The Organization Chart models the structure of the Incident

BRD user enter the system in a role-function and automatically become an element of the Organization Chart

The Organization Chart grows if messages are sent or received by external Organizations

The Organization Chart allows easy communication with involved parties



# Common Operational Picture – Map

← M0005 - Eintrag (1/5) ↑ ↓ 📄

**Info \***

**Tr** Extrem heavy snowfall the last 24h in the Dachstein area  
Station Krippenstein measures +120 cm

Ausgang  Entscheidung  Eingang

**Hohe Priorität**

**n/y**


**Anmerkung / Rückmeldung**

**Tr**

📄 MELDER » GEOSPHERE ⌵



📄 EMPFÄNGER » BV ⌵

📄 VERTEILEN ⌵

📄 ORT  ⌵

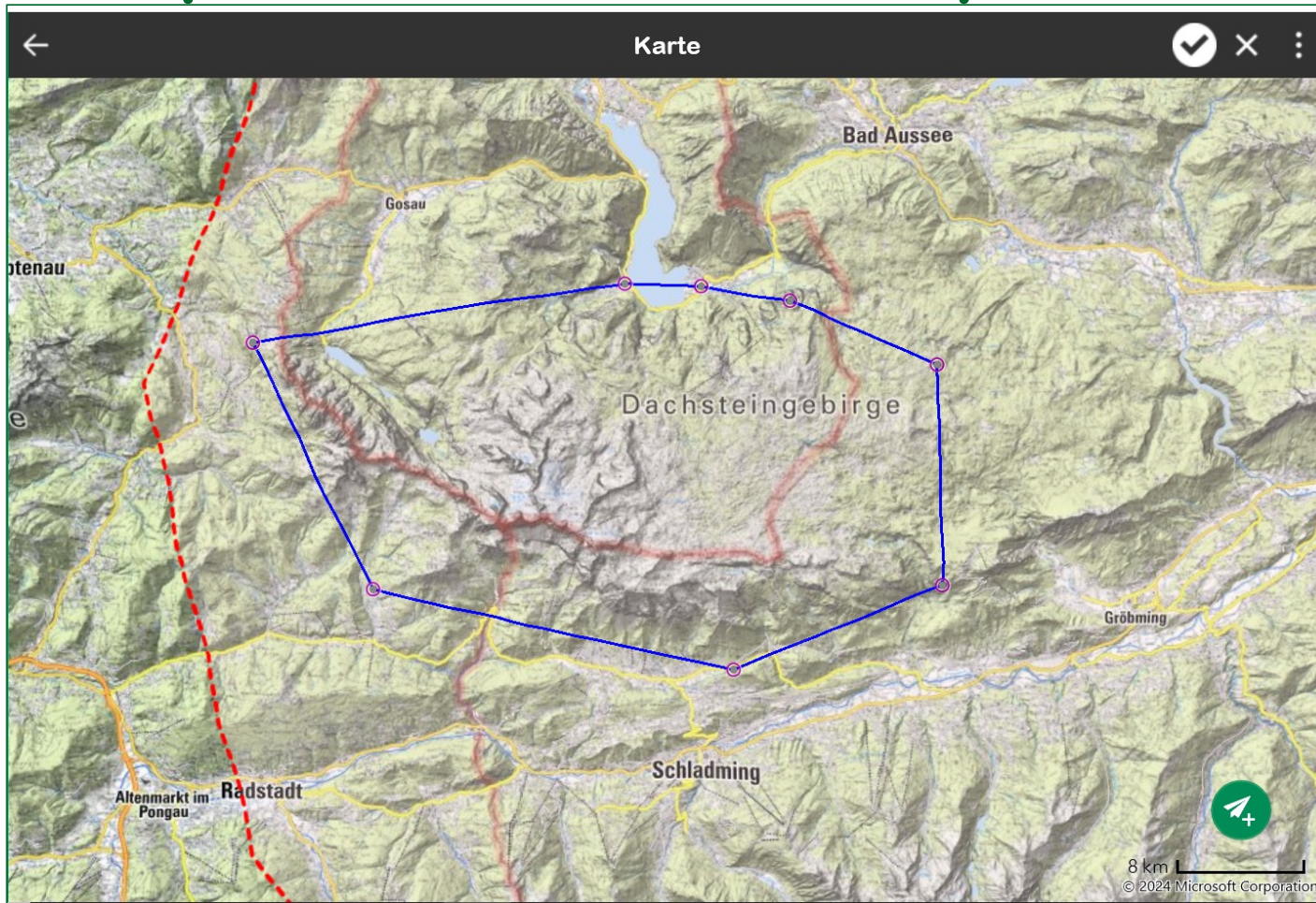
📄 MEDIEN (0) RÜCKMELDUNGEN (0) LAGEINFORMATION (0) ⌵

📄 HISTORIE ⌵

 Anhang  Lageinformation



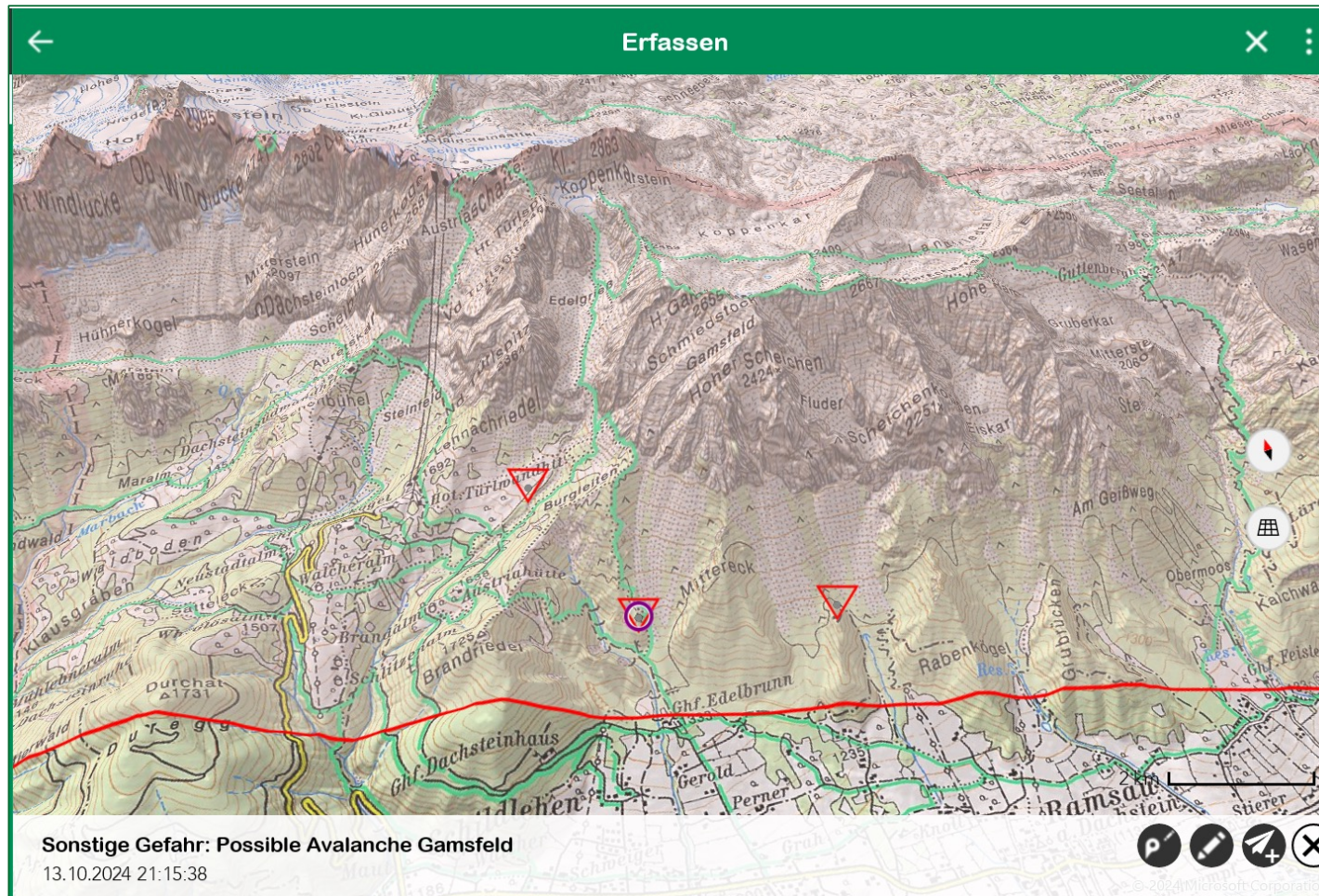
# Common Operational Picture – Map







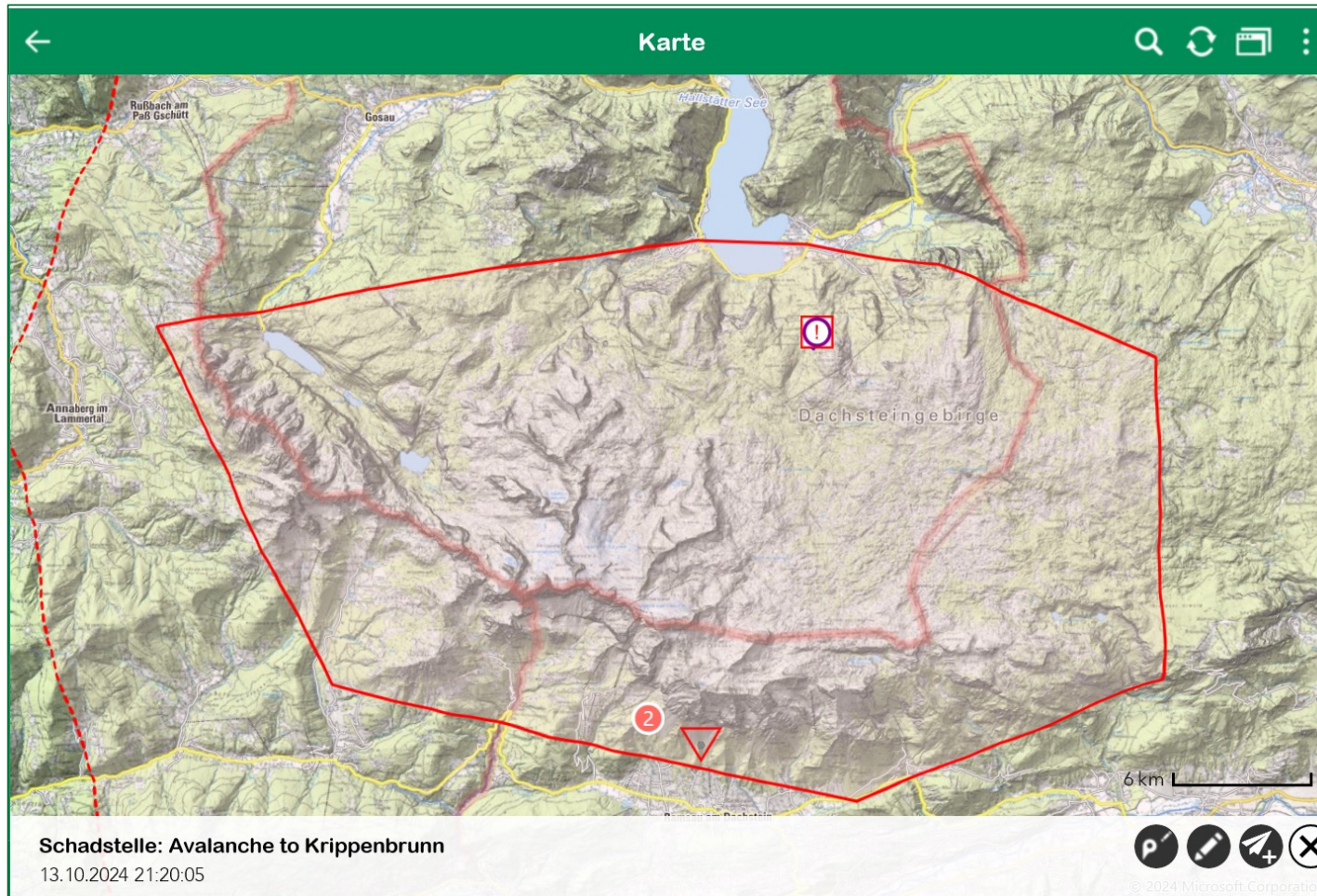
# Common Operational Picture – Map







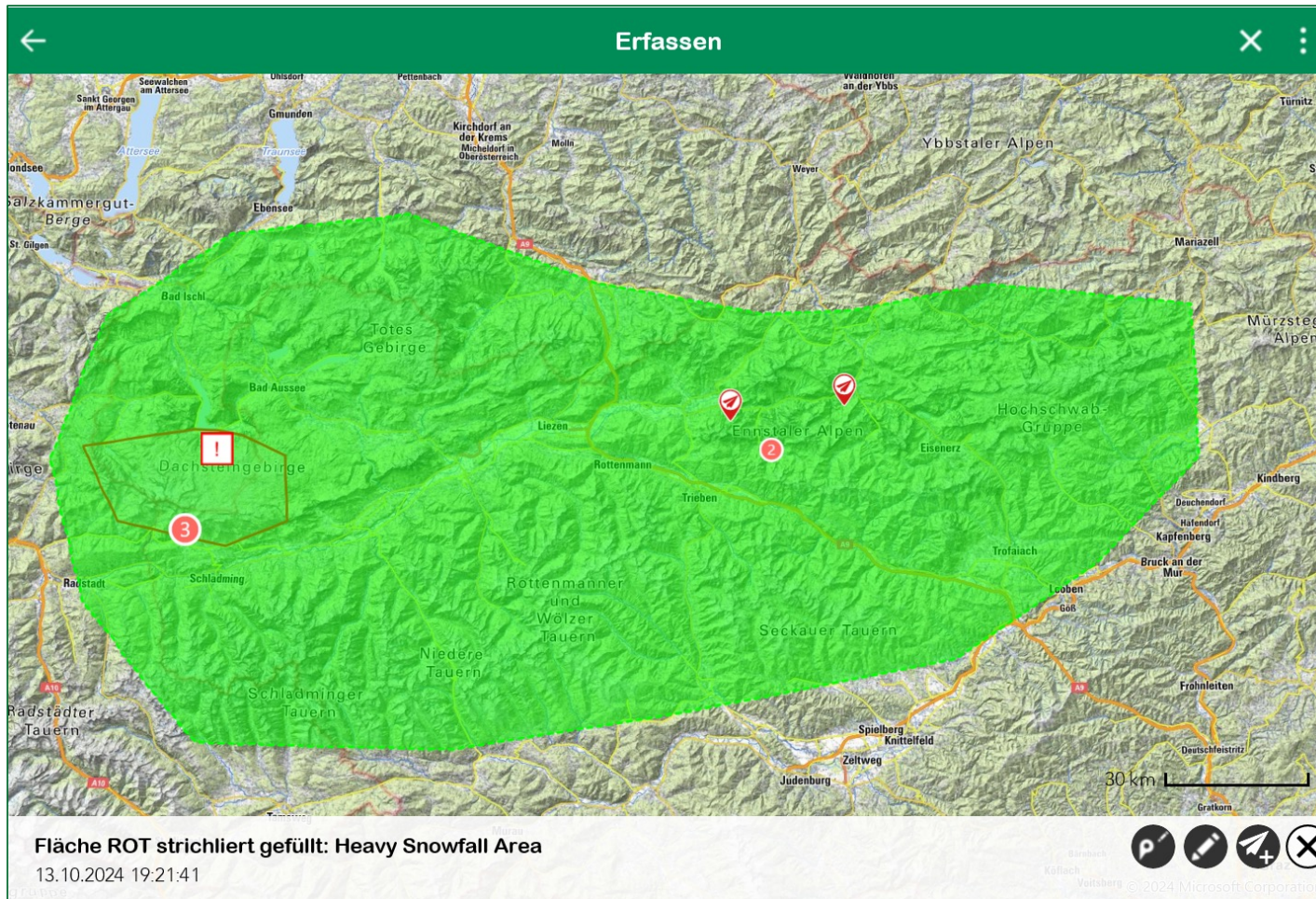
# Common Operational Picture – Map







# Common Operational Picture – Map





## Common Operational Picture – Map

The Map provides a graphical Common Operational Picture in the incident area

The incident Map can include icons, shapes, line and text elements

Map elements can be related to Messages

All users have realtime access to the Map



## Summary

Österreichische Bergrettungsdienst is a elementary component of Civil Protection in Austria

We need to prepare for large scale Events and establish Crisis- and Disastermanagement

This a great Opportunity for improving collaboration and communication within our organization

Incident Command together with „Blackout save“ communication provides the necessary technolgy platform



# Questions & Discussion

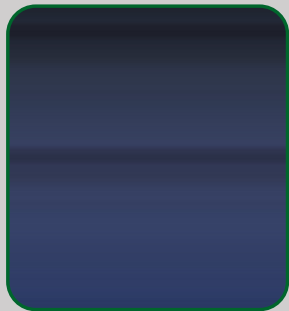


## About



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