Sleet in Slovenia, February 2014

Jernej Hudohmet Administration of the Republic of Slovenia for Civil Protection and Disaster Releif

> "Black Out", Bolzano March 2015

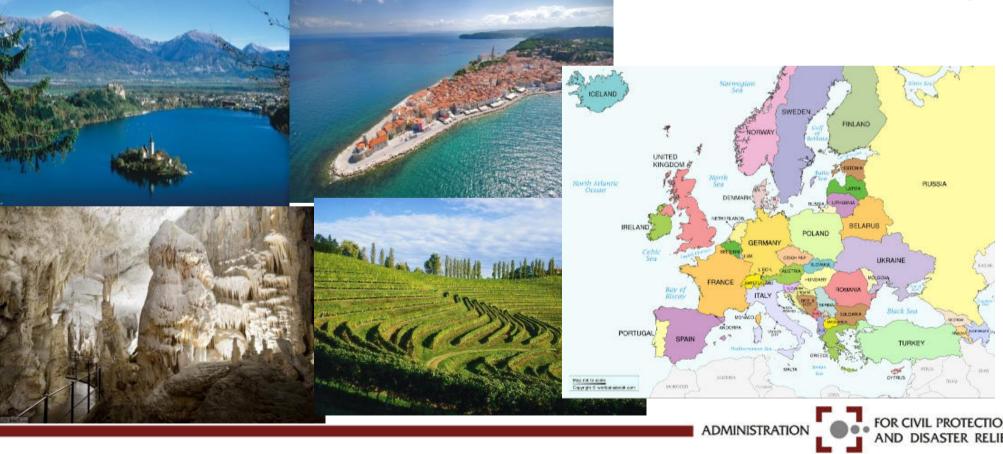




FACTS ABOUT SLOVENIA

- Area: 20,273 km2
- Population: 2,055,496 (2012)
- Capital: Ljubljana

central European position, neighbouring countries: Austria, Italy, Croatia, Hungary

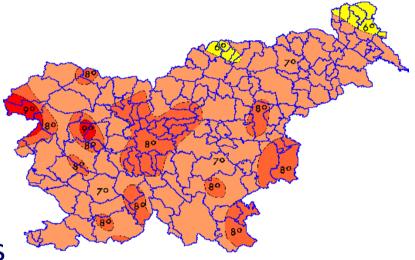


DISASTER RISKS IN SLOVENIA

- earthquakes
- floods
- forest fires
- landslides, avalanches



- industrial and other accidents involving hazardous material
- recently: weather related disasters (hail, storms, strong wind, sleet)



DMINISTRATI

LJUBLJANA EARTHQUAKE - 1895





System of Protection against Natural and

ADMINISTRATION

FOR CIVIL PROTECTION AND DISASTER RELIEF

Other Disasters in Slovenia

SLEET IN SLOVENIA – History

History repeats itself - years 1899 and 2014





Žled na sadnem drevju na Pivki. (Dne 15. grudna 1899.)

Fot. R. Seber.

Po žledu poškodovano drevje na Pivki. (Dne 15. grudna 1899.)





SLEET IN SLOVENIA – Natural phenomena

HOW DOES IT OCCUR

- Low temperatures in the lower layers and near the ground
- Worm winds and higher temperatures in the higher atmosphere layers

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- Raindrops turn into ice upon touching any kind of surface



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SLEET IN SLOVENIA in 2014

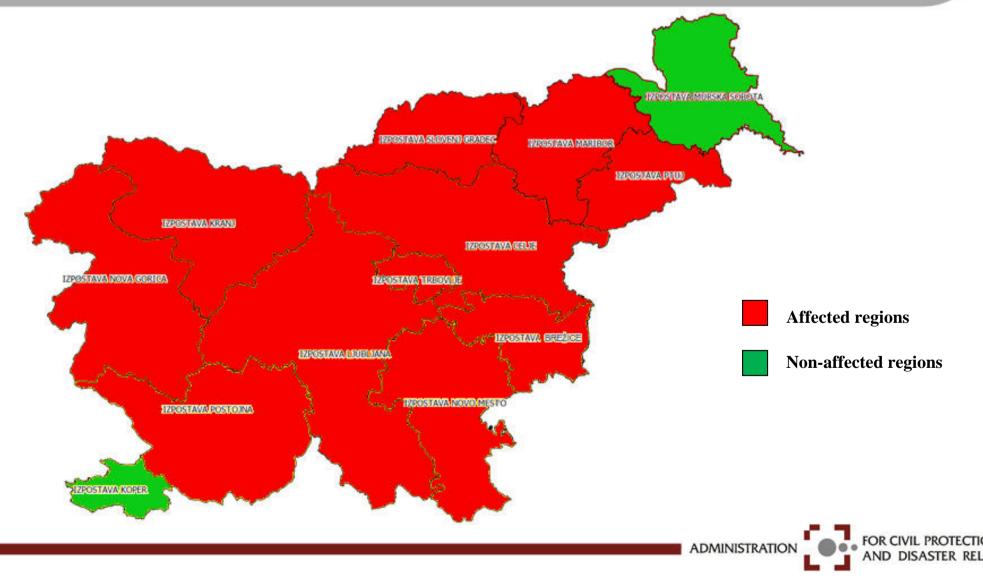
SLEET in FEBRUARY 2014

- First major problems due to sleet occured on Friday, 31 January 2014
- Because of the heavy burden and weight accumulating on different surfaces trees and electrical infrastructure started to collapse and fall down.
- On Sunday, 2 February there was widespread damage on electrical infrastructure and forests; thousands of households without electricity

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SLEET IN SLOVENIA – Situation 2 February 2014

11 out of 13 regions and 160 out of 212 municipalities were affected





SLEET IN SLOVENIA - CONSEQUENCES

- Over 3000 km of electrical grid affected <u>BLACKOUT</u>
- Long-term reconstruction of electrical grid
- 51 % of forests in Slovenia damaged (7 mio m3)
- It will take decades to mitigate damage in the forests
- Damage on road and railway infrastructure
- Combined estimated damage is over 430 million €





SLEET IN SLOVENIA– Affected population

- **20 % of population without electricity** (over 7.500 transformer stations)
- Households without the electricity on 2 February 2014

Provider	No. of housholds	
Elektro Ljubljana	70.000	
Elektro Maribor	20.000	
Elektro Celje	17.600	
Elektro Gorenjska	3.800	
Elektro Primorska (Postojna, Pivka)	5.300	
SUM	116.700	

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SLEET IN SLOVENIA – National response

- <u>Civil Protection Headquarters of the Republic of Slovenia</u> with the support of the <u>Administration of the RS for Civil Protection</u> and <u>Disaster Relief</u> coordinating the overall response of all actors; regional and municipal CP HQ activated
- Firefighters (volunteer and professional), other rescue services, Civil Protecion units
- Electro companies (SODO electricity distribution system operator) and other public bodies
- Slovenian Armed Forces and Police
- TOTAL: 55.000 rescue and other personnel
- 3 casualties and 23 injured at the end of the intervention among rescuers, electrical company workers and army personnel















SLEET IN SLOVENIA – Request for International assistance

- On 2 February 2014 (Sunday) Slovenian Governement requested assistance through the Union Civil Protection Mechanism - the Emergency Response Coordination Centre: 100 power generators (between 100 and 300 kW)
 - First teams (from Germany, Czech Republic and Austria) with generators arrived to Slovenia already 14 hours after the request

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- On **5 February second request** for 5 high power generators (1000 kW)
- <u>Additional power generators</u> were offered <u>bilaterally</u> by several countries, organizations and individuals
- The requested need of high power generators was reached on **10 Feb 2014**







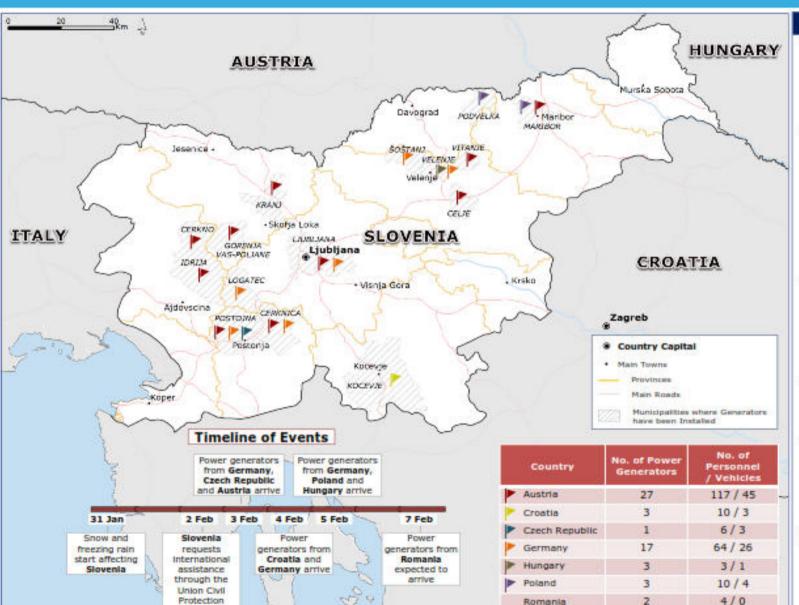




SLEET IN SLOVENIA – Timeline

6 February 2014: Slovenia – Severe Weather – International Assistance





Mechanism

SITUATION

- Heavy snow and freezing rain affected Slovenia over several days. since 31 Tanuary. 45 . result. extensive were DOMEC outages caused, which led the country to request International assistance through the Union Civil Protection Mechanism.
- As of 5 February, 50 000 people were still without electricity, some for the 5th consegutive day. More than 3 600 fire-fighters, 300 Civil Protection Members. 1 000 representatives of the Red Cross, Karitas Slovenia and other NGOs, 400 military personnel and more than 1 900 representatives of responsible parties (electricity, municipal services, water supply, etc.) are working to mitigate the consequences.
- Worst affected is the south-western area of the country, especially the municipality of <u>Postojna</u>. The city of Postojna (10 000 inhabitants) is still without electricity and all electrical lines are damaged. Local authorities estimate that the power lines will not be repaired for another month in that region.
- The Base of Operation for foreign units is set up in the Protection and Rescue Centre in Logates. There is still need for electric power generators, although the situation is improving.
- In addition to power generators, Austria provided Host Nation Support for foreign teams travelling through Austria to Slovenia. International teams ane also supporting local rescue teams and performing other activities.

Weather Forecast

 On 7 February, light rain and possible snow at approx. over 900m altitude is forecasted for the mountains in the west and strong winds mostly in the north-east. On 8 February, rainfall is expected over most of the country. (NMS)

SLEET IN SLOVENIA – International assistance – Teams with generators

 <u>Slovenia received assistance 172 generators from 11 countries</u> (Austria, The Czech Republic, Germany, Croatia, Hungary, Italy, Poland, Romania, Slovakia, Serbia and USA):

100 high capacity generators - via the Union CP Mechanism 72 generators (mainly low capacity) – bilaterally.

- The teams with generators deployed all over Slovenia
- All teams returned home till 28 February (gradually), some generators remained till May 2014
- Assistance power generators for public and pepole's use only: public buildings (hospitals, municipal offices, kindergartens, remote villages and others in need, not for commercial use)

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SLEET IN SLOVENIA – International assistance

International assistance offered via the Union Civil Protection Mechanism

COUNTRY	NO. OF POWER GENERATORS	NO. OF PERSONNEL	DURATION OF THE MISSION
Austria	39 generators	424 persons	3–21 February
Czech Republic	3 generators	28 persons	3-23 February
Germany	22 generators	166 persons	3-28 February
Hungary	3 generators	drivers	5- 19 February
Poland	3 generators	18 persons	5- 23 February
Romania	2 generators	4 persons	7-19 February
TOTAL	72 generators (68 higher, 4 low power)	<u>640 persons</u>	

SLEET IN SLOVENIA – International assistance

International assistance offered biletarally

COUNTRY/ORGANI ZATON	NO. OF POWER GENERATORS	REMARKS
Croatia	3 generators	Croatian power company (HEP)
Austria	2 generators	Bilateral – cross border cooperation with Carinthia (for the Jezersko municipality)
Austria	11 low power generators	Cross-border cooperation with Carinthia (for the Solčava municipality)
Italy	5 generators (1 high, 4 low)	Cross border cooperation (Country Union of the FVG)
Italy	4 generators	Unione Italiana, donation
Italy	36 generators (1 high, 35 low power)	Cross border cooperation (Civil Protection of municipalities Čedad/ Cividale del Friuli, Marčon/ Comune di Marcon and Čenta/ Tarcento)
Austrian Red Cross	15 low power generators	Bilateral, cross-border cooperation
Maltese Knight Order	8 low power generators	Bilateral cooperation between AT and SI national cells
Serbia	5 generators (5 x 120 kW)	Bilateral cooperation - unitl May 2014
Slovakia	1 generator: 1 x 110 kW	Bilateral cooperation 11- 23 February 2014
USA	10 generators	Bilateral cooperation , donation
TOTAL	> 100 generators (14 higher, 86 low power)	

SLEET IN SLOVENIA – International assistance

Assistance of foreign teams not only with generators, but also:

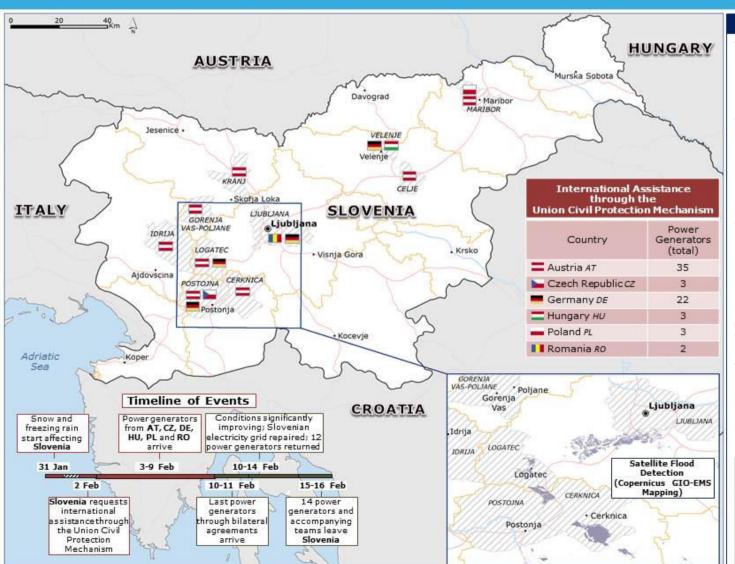
- Cleaning and other assistance to local rescue units
- Support in coordination of international teams and generators (daily movements of generators, personnel etc.), up-dating of lists etc.
- Other technical support, maintenance
- Field kitchen
- Toll examption and support in Austria, Croatia for transit of assistance to Slovenia
- Friendly relations, exchange of knowledge, joint experiences
- Very positive atitude from the population and Slovene rescuers, electricians and all involved

INISTRATION

SLEET IN SLOVENIA – Second phase

18 February 2014: Slovenia – Severe Weather – International Assistance

European Commission



SITUATION

Heavy snow and freezing rain started affecting **Slovenia** on 31 January and continued over several days. As a result, extensive power outages were caused, which led the country to request international assistance, also through the Union Civil Protection Mechanism.

During the first days after the request, 13 countries, namely Austria. Republic, Bulgaria, the Czech France, Germany. Croatia. Hungary, Italy, Poland, Romania. Slovakia, Serbia and the USA, offered assistance. In total, Slovenia accepted 83 high power and 47 lower power generators via the Union Civil Protection Mechanism, as well as through bilateral agreements. Over 10-14 February, conditions

significantly improved and the destroyed parts of the electricity network were repaired as fast as conditions allowed. Need for assistance is gradually being reduced and the return of the power generators and the accompanying teams is being coordinated with the countries of origin. (Source: Slovenian Civil Protection)

Meteorological/Hydrological Forecast

 On 19 February, occasional rainfall is expected, mostly in the western part of the country. (NMS)

the country. (<u>NMS</u>) • As of 18 February, flow rates of the rivers in the country are high, but stabilising or declining. The National Hydrological Service has an Orange Alert for Floods along the river Ljubljanica, where floods were detected on 14 February through the <u>Copernicus</u> <u>EU programme</u> (*inset map*). A Vellow Alert for Floods is also in effect in the area of the river Krka. (<u>NHS</u>)

Country Capital Main Towns Provinces

- MainRoads
- MainRivers
- Municipalities where Generators
 - have been Installed
 - Satellite Flood Detection (Copernicus)

TER RELIEF

SLEET IN SLOVENIA – International assistance – Main features

- Slovenia requested assistance through the EU CP Mechanism for the first time
- Coordination of international assistance: Administration of the Republic of Slovenia for CP and Disaster Relief – HNS Cell
- Assistance in a form of **172 power generators** (also bilaterally)
- Duration of the international assistance: 3–28 February 2014 (some generators till May)
- 640 foreign rescuers in total
- Intensive HNS Support
- No EU Civil Protection Team deployed

SLEET IN SLOVENIA – Request for Assistance

- Request for 100 power generators (between 100 and 300 kW), additionaly for 5 high power generators (1000 kWa)
- Clear and detailed/simple request for the type of assistance (number, power)
- No information on availability of power generators in other countries, no data in CECIS, no previous experiences

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• Not knowing the manpower accompanying the generators

SLEET IN SLOVENIA – Communications

- 2 February: request via CECIS, phone call to ERCC
- No pre-alert or information on emergency
- Bilateral pre-information (phone call) on the up-coming request in CECIS
- Constant/daily contacts and information flow with ERCC (considerations for additonal requests)
- Daily Situation Reports prepared by ACPDR and sent to ERCC
- ERCC SIT Reps and Daily Maps

SLEET IN SLOVENIA – Communications

- Daily communication with embassies of sending countries, Slovenian representations abroad, international partners
- VIP visits
- Daily reports for media on international assistance
- Technical means for foreign teams mobile phones, additional repeaters

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SLEET IN SLOVENIA – Host Nation Support

- In order to effectively receive and coordinate international assistance Host nation support (HNS) was established in line with the draft national Manual on HNS
- HNS Cell as part of the Support team to the National Civil Protection Staff
- Upon arrival to Slovenia (every team met at border) international units were provided with:
 - Liasion officer for each foreign team
 - Escort and tolls exemption
 - Accommodation and food for all units (Base of Operations and several other locations)

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- Fuel and spare parts for the power generators
- Transport of relief personnel

SLEET IN SLOVENIA – Base of Operations

- The main **Base of operations** for international teams in **Logatec**
- Accommodation and food provided
- Service, maintainance for the power generators and vehicles
- HNS Coordination Headquarters manned by Civil Protection staff





SLEET IN SLOVENIA – Coordination

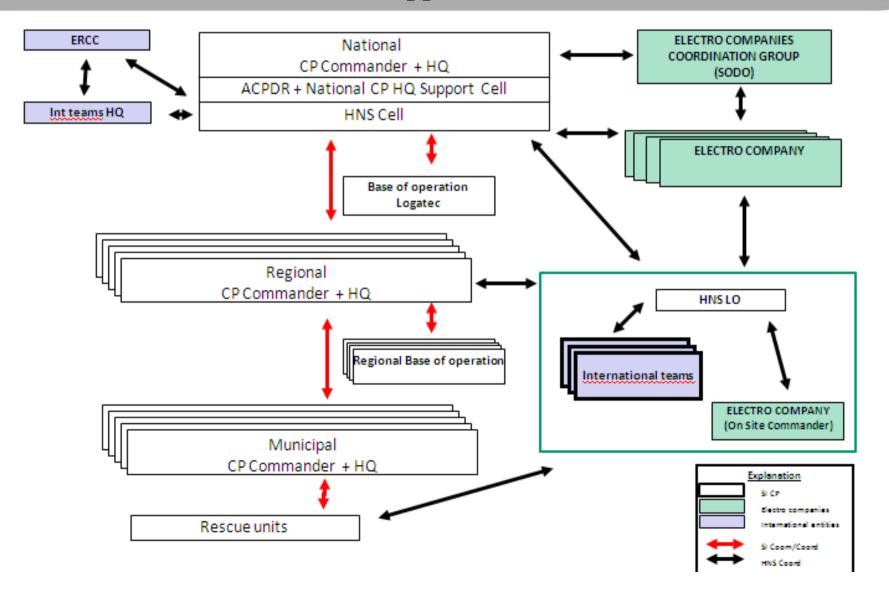
- Daily meetings/briefings with heads of international teams and HNS officer
- Coordination of daily needs with electro distribution, daily redeployments of teams and change of locations of generators
- Coordination on site with electro-companies (CP personnel present)
- Liaison officer for each foreign team (transport of relief personnel, fuel and spare parts for the power generators, liasion with local units)

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• Safety and security of workers and security for generators

SLEET IN SLOVENIA – Host Nation Support

Host nation support structure







ADMINISTRATION



SLEET IN SLOVENIA – lessons observed

- We cannot predict all scenarios (use of generic plans and solutions)
- Rapid and effective assistance from the Union Mecahnism Participating States and others – helped to mitigate the situation, very appreciated by affected people – <u>THANK YOU!</u>
- It is necessary to send personnel to operate with the technical in-kind assistance
- Challenge: tracking of generators, moving frequently to another location system to be established, for future emergencies i.e. use of labels)

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SLEET IN SLOVENIA – lessons observed

- Good cooperation with ERCC support with maps, dissemination Room for improvement: use of CECIS, disemination of daily reports
- Differences between Union Mechanism trained not trained personnel (both international units and domestic-local coordination, liasion officers): list of personnel, equipment, daily coordination, final reports <u>Room for improvement</u>: <u>more participants at EU CPM training (also specialised national courses on EU CPM focused on HNS))</u>
- Experiences and knowing each other from previous joint trainings through the EU CPM Training programme, IPA programmes and other projects – to be continued
- Languge barriers: Room for improvement: foreign language training, additional personnel

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SLEET IN SLOVENIA – lessons observed

- Good relations with neighbouring cuntries: HNS for transiting teams and assistance – <u>keep and maintain it</u>
- Cooperation with MFA, foreign embassies <u>continued</u> <u>awareness</u>, <u>information about the mechanism activities</u>
- Test for Slovenian HNS support in real (prevous exercises the same location of BOO, same personnel – national and international) – to be incorporated in the national HNS Manual
- The importance of the Mechanism and cooperation within EU has been recognized by many stakeholders in Slovenia
- It's important to further train together in order to be ready for next emergencies.

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THANK YOU FOR YOUR ATTENTION!

Ministrstvo za obrambo Uprava Republike Slovenije za zaščito in reševanje Vojkova 61 1000 Ljubljana Slovenija

Phone: +386 1 471 3322 E-mail: urszr@urszr.si http://www. sos112.si

