



**NATIONAL COMMISSIONER OF THE ICELANDIC POLICE**  
DEPARTMENT OF CIVIL PROTECTION AND EMERGENCY MANAGEMENT



## Status report from the National Crisis Coordination Centre

**Date:** 26. August 2014 at 17:00

**Regarding:** Bardabunga seismic activity

### Main Points:

- **Alert phase is still in effect.**
- **Continued strong seismic activity in the area by the edge and north of Dyngjujökull. Earthquakes M5.7 in the Bardarbunga caldera and M4.6 by the edge of Dyngjujökull**
- **Highland closures remain in effect.**
- **No restrictions are on flights. Aviation color-code set by the Icelandic MetOffice remains orange**

### Civil Protection phase:

The National Commissioner of the Icelandic Police, together with the District Commissioners in Húsavík and Seyðisfjörður decided to continue the Civil Protection phase on **alert phase**, based on the most recent scientific advice. The Advisory Board of scientists from the Icelandic Met Office and the Institute of Earth Sciences, and representatives of the Civil Protection in Iceland met this morning.

### National Crisis Coordination Centre:

The National Crisis Coordination Centre in Skógarhlíð has been in operation since it was decided to close the highland area due to seismic activity in Bárðarbunga on 19 August, 2014. The centre coordinates operations and information due to the seismic unrest in the Bárðarbunga area, in Northern Vatnajökull glacier.

### Seismic activity:

#### Seismic activity continues to be high.

The biggest earthquake in the current swarm was measured **M 5.7** at 01:26, August 26th. The event was localized in the northern/northwestern part of Bardarbunga caldera at 6 km depth. At 11:56 UTC an earthquake of **M4.6** (EMSC M4, 4) occurred at 8 Km depth in the dyke under the Dyngjujokull glacier margin. It was felt in Akureyri Northern Iceland. Most of the seismic activity is close to the rim of Dyngjujokull. The dyke is still migrating to the north and the tip of it is already around 10 km outside of the glacier. Most of the events are at the depth of 8-12km.

There have been no signs of harmonic tremor.

The dyke beneath Dyngjujökull is now thought to be close to 40 km long. Model calculations, based on GPS data suggest that a total volume of up to 350 million cubic meters have intruded into the crust since the activity started or about 50 million cubic meters of magma have added to the volume in the last 24 hours.

Additional stations for continuous GPS monitoring will be installed north of Vonarskarð and on Urðarháls within a few days.

There are no indications that the intensity of the activity is declining. Currently, three scenarios are considered most likely:

- The migration of magma could stop, attended by a gradual reduction in seismic activity.
- The dike could reach the surface of the crust, starting an eruption. In this scenario, it is most likely that the eruption would be near the northern tip of the dike. This would most likely produce an effusive lava eruption with limited explosive, ash-producing activity.



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- An alternate scenario would be the dike reaching the surface where a significant part, or all, of the fissure is beneath the glacier. This would most likely produce a flood in Jökulsá á Fjöllum and perhaps explosive, ash-producing activity.

Other scenarios cannot be excluded. For example, an eruption inside the Bárðarbunga caldera is possible but presently considered to be less likely.

### Meetings and collaboration:

The coordination of the operation continues at the National Crisis Coordination Center. This morning there was a meeting with the Civil Protection council of scientists where the situation was reassessed according to the latest information. After the meeting a teleconference was held with the District Commissioner at Husavik to coordinate measures and updating evacuation plans on local level.

### The closed area:

Restrictions on roads and areas in Jökulsárgljúfur Canyon up to Dettifoss waterfall have been lifted on the east side but the closure on the west side is still in effect, as well as closures in the highlands North of Vatnajökull glacier.

A map of the closed roads can be found on the website of the Icelandic Road and Coastal Administration <http://www.vegagerdin.is/media/umferd-og-faerd/Halendi.pdf>

The Icelandic Met Office has changed the aviation color-code to orange. All restrictions on aviation have been cancelled. All scheduled services airports in Iceland are open.

### Information

A media unit is placed at the National Crisis Coordination Center, providing information and dealing with media requests. The email address is [info@sst.is](mailto:info@sst.is) Tel: +354-5702644/43. The website on safe travel in Iceland is updated regularly: [www.safetravel.is](http://www.safetravel.is)

### Next status report:

Status reports will be sent from the National Crisis Coordination Center if needed.

The National Commissioner of the Icelandic Police, Department of Civil Protection and Emergency Management  
[www.almannavarnir.is](http://www.almannavarnir.is)